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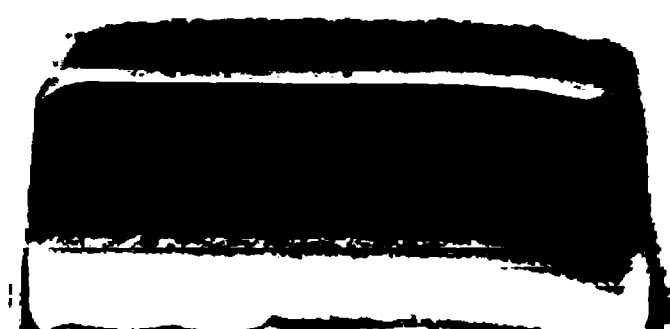
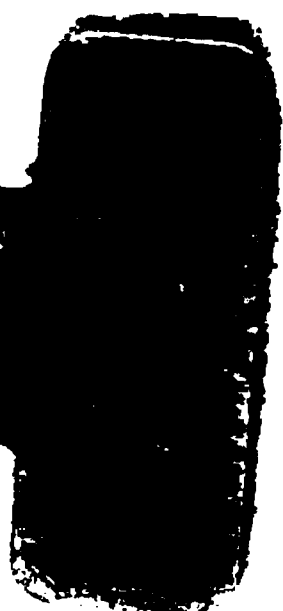
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JOINT DOCUMENTS.

End

JOINT DOCUMENTS

OF THE

3522.2

STATE OF MICHIGAN,

FOR THE YEAR 1889.

IN THREE VOLUMES.

VOL. III—PART I.

BY AUTHORITY.

LANSING:
DARIUS D. THORP, STATE PRINTER AND BINDER.

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1. **Fifty-third Annual Report of the Superintendent of Public Instruction of the State of Michigan, with Accompanying Documents, for the year 1889.**
2. **Seventh Annual Report of the Bureau of Labor and Industrial Statistics. Issued February 1, 1890.**

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OF THE
SUPERINTENDENT OF PUBLIC INSTRUCTION
OF
THE STATE OF MICHIGAN,
WITH
ACCOMPANYING DOCUMENTS
FOR
THE YEAR 1889.

BY AUTHORITY.

LANSING:
DARIUS D. THORP, STATE PRINTER AND BINDER.
1889.

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STATE OF MICHIGAN,
DEPARTMENT OF PUBLIC INSTRUCTION,
Lansing, December 31, 1889. }

To His Excellency, CYRUS G. LUCE,

Governor of the State of Michigan:

SIR,—In compliance with the provisions of law, I have the honor herewith to transmit through you to the Legislature, the annual report of the Superintendent of Public Instruction, together with the accompanying documents, for the year 1889.

Very respectfully,

Your obedient servant,

JOSEPH ESTABROOK,

Superintendent of Public Instruction.

SUPERINTENDENT'S REPORT.

SCHOOL ATTENDANCE.

An examination of the reports from the school districts of the State disclose certain facts of most vital importance in connection with the practical working of our public school system. A careful analysis of these reports and of the annual reports of this Department for a series of years, reveals the fact that there has been a small but constant annual decrease in the percentage of attendance at the public schools of the State as compared with the number of children of school age in the State. The following table gives the per cent. of attendance at the public schools from 1880 to 1889 inclusive, with the per cent. of increase or decrease for each year:

TABLE—Showing the Per Cent. of Attendance to School Census from 1880 to 1889 Inclusive.

Year.	Percentage of Attendance.			Annual Increase.			Annual Decrease.		
	Graded Schools.	Ungraded Schools.	All the Schools.	Graded Schools.	Ungraded Schools.	All the Schools.	Graded Schools.	Ungraded Schools.	All the Schools.
1880.....	66.	75.6	71.6	.....	.....	.....	.....	.....	.....
1881.....	67.	75.4	71.7	1.	.....	.1	.....	.2	.....
1882.....	67.	75.4	71.5	.....	.....	.....	.....	.....	.2
1883.....	66.8	72.3	69.8	.....	.....	.....	.2	3.1	1.7
1884.....	65.4	74.2	70.1	.....	1.9	.3	1.4	.....	.....
1885.....	63.9	73.8	69.2	.....	.....	.....	1.5	.4	.9
1886.....	63.6	73.8	69.	.....	.....	.....	.3	.....	.2
1887.....	62.	74.1	69.6	.....	.3	.6	1.6	.....	.....
1888.....	62.	73.1	67.5	.....	.....	.....	.....	1.	2.1
1889.....	61.	71.5	66.2	.....	.....	.....	1.	1.6	1.8

From the above table it appears that there has been a decrease of 5 per cent. in attendance in graded school districts from 1880 to 1889; a decrease of 4.1 per cent. in ungraded, and of 5.4 per cent. in all the schools. For six of the ten years included in the table there was a decrease in the per

cent. of attendance in graded schools over the preceding year; in two years the per cent. was the same, and in one year, 1881, there appears to have been an increase of 1 per cent. over the preceding year. The ungraded schools show a decrease for five years, an increase for two years, and no change for two years, while the per cent. for all the schools shows a decrease for six years and an increase for three years.

The showing for the past year is even less satisfactory. Not only was there a decrease in the *percentage* of attendance, but the *actual enrollment* was 1,614 less in 1889 than in 1888. In other words, while there were 10,146 more children of school age in the State in 1889 than in the preceding year, the number attending the public schools was 1,614 less. The reports show that while there was an increased attendance at the graded schools of 3,285, in the ungraded districts there was a decrease of 4,899.

These facts are worthy of thoughtful consideration, with a view of locating, if possible, the reason for this gradual but constant falling off in public school attendance. A thorough investigation into the causes leading to these results would necessitate the collection of various facts that would require more time to obtain than has been at my disposal since the subject was first considered, and I can only give at present such data as was readily accessible, bearing upon the question, and which may induce others to extend the investigation along the lines suggested, leaving any attempted solution of the problem for the next report of this Department.

It is interesting to note in this connection that during the period included in the above comparison, a general compulsory attendance act was passed (in 1883), and an act relating to the compulsory reformatory education of juvenile disorderly persons (passed in 1885). The natural and anticipated effect of these statutes was increased attendance, but while accomplishing this result in certain localities, they have certainly failed so far as affecting the general attendance throughout the State. This failure may possibly be attributed to the imperfections and inconsistencies that frequent amendments have made in the original acts.

The following tables show the percentage of attendance in the incorporated cities of the State for 1880 and 1889, with the respective increase or decrease, and the percentage of attendance at private schools in such of the cities as have reported this item for the above mentioned years. While this item of attendance at private schools is largely estimated and consequently far from being perfectly reliable, still a comparison for any two years would probably be sufficiently correct to be of interest in investigating the causes of decreased attendance on the public schools in cities, where a large percentage of the private schools are located. Extra effort will be made the coming year to

secure more reliable information on this point, with a view of determining to what extent, if at all, the private schools are responsible for the diminishing public school attendance.

Cities.	Percentage of resident attendance to school census in cities in 1880.	Percentage of resident attendance to school census in cities in 1889.	Increase in percentage in 1889 over 1880.	Decrease in percentage in 1889 over 1880.
Adrian.....	64.5	56.2	.....	8.3
Albion.....	75.7	69.4	.....	6.3
Alpena.....	63.2	46.7	.....	17.5
Ann Arbor.....	57.8	52.2	.....	5.1
Battle Creek.....	61.7	48.5	.....	13.2
Bay City.....	50.5	43.1	.....	7.4
Big Rapids.....	89.5	80.	.....	9.5
Cadillac.....	72.2	84.6	12.4	.....
Charlotte.....	93.8	89.1	.....	4.7
Coldwater.....	81.4	83.5	2.1	.....
Corunna.....	91.6	86.6	.....	5.
Detroit.....	39.8	30.6	.....	9.2
Dowagiac.....	70.9	76.7	5.8	.....
East Saginaw.....	50.9	45.8	.....	5.1
Eaton Rapids.....	97.6	89.8	.....	8.8
Escanaba.....	78.2	38.8	.....	39.4
Flint.....	71.1	68.8	.....	2.3
Grand Haven.....	67.4	62.5	.....	4.9
Grand Rapids.....	53.6	65.2	11.6	.....
Greenville.....	96.1	97.	.9	.....
Hastings.....	95.6	76.5	.....	19.1
Hilledale.....	73.1	75.6	2.5	.....
Holland.....	75.4	74.6	.....	.8
Ionia.....	72.7	63.5	.....	4.2
Ishpeming.....	77.7	65.6	.....	12.1
Jackson.....	68.6	61.7	.....	6.9
Kalamazoo.....	69.3	56.6	.....	12.7
Lansing.....	67.3	68.4	1.1	.....
Lapeer.....	79.8	94.3	14.5	.....
Ludington.....	75.5	75.	.....	.5
Manistee.....	58.6	54.3	.....	4.3
Marquette.....	56.5	57.4	.9	.....
Marshall.....	60.7	63.4	3.4	.....
Mason.....	74.2	105.3	31.1	.....

Cities.	Percentage of resident attendance to school census in cities in 1880.	Percentage of resident attendance to school census in cities in 1889.	Increase in percentage in 1889 over 1880.	Decrease in percentage in 1889 over 1880.
Menominee.....	48.7	56.5	7.8	.....
Monroe.....	22.4	26.6	4.2	.....
Mt. Clemens.....	54.5	50.	.....	4.5
Muskegon.....	46.	62.8	16.8	.....
Negaunee.....	67.4	42.1	.....	25.3
Niles.....	67.8	70.6	2.8	.....
Owosso.....	82.9	79.6	.....	3.3
Pontiac.....	78.8	83.2	9.4	.....
Port Huron.....	61.7	48.8	.....	12.9
Saginaw.....	56.8	58.5	.....	2.8
Sault Ste. Marie.....	57.5	61.4	3.9	.....
St. Clair.....	75.5	78.8	2.8	.....
Stanton.....	80.7	43.	.....	37.7
West Bay City.....	73.4	77.9	4.5	.....
Wyandotte.....	57.5	85.	.....	22.5
Ypsilanti.....	81.4	48.	.....	33.4

From the above table it appears that of the 50 incorporated cities of the State, 19 show an increased per cent. of attendance in 1889 over 1880, and 31 report a decrease. In each case the percentage is computed on the basis of the attendance of children residing in the district, the reported non-resident attendance having been deducted.

The percentage for all the above mentioned cities for 1880 was 55.7, and for 1889, 41.2, or an average decrease of 14.5 per cent.

The city of Mason presents an instance of one of the many complications that are met with in studying this question. It will be seen from the table that the per cent. of attendance reported in this city for 1889 is 105.3. That is, more *resident children* were enrolled in the public schools than there were children in this district. This apparant paradox is explained by the fact that a number of families having children attending the public schools removed from the city before the annual school census was taken, and consequently the children appear in the enrollment but not in the census. May not the reverse of this explain, partially, at least, the *decrease* in some cities, especially in such as are growing rapidly? That this condition does not enter very largely into the question is shown in the case of Grand Rapids. Probably this city has had as large a proportionate growth from 1880 to 1889 as any city in the State, and yet the percentage of school

attendance has increased 11.6 per cent. during this period. While this question of change in population may affect the attendance in a few cases, it is undoubtedly an unimportant factor in considering the *average* increase for all the cities.

The following table gives the percentage of attendance at private schools during 1880 and 1889 in such cities as report this item for each of these years. As stated above, these reports are largely estimated, and are given here more with the hope of stimulating to greater accuracy in securing this important item in the future, than as furnishing any positively reliable explanation of the decreased attendance at the public schools.

Cities.	Percentage of Attendance at Private Schools to School Census of 1880.	Percentage of Attendance at Private Schools to School Census of 1889.	Increase.	Decrease.
Adrian.....	19.	24.8	6.8	.....
Ann Arbor.....	11.2	9.9	.....	1.3
Battle Creek.....	16.4	19.6	3.2	.....
Bay City.....	5.5	18.8	12.8	.....
Big Rapids.....	2.1	14.2	12.1	.....
Detroit.....	16.5	19.8	3.3	.....
East Saginaw.....	8.2	6.9	.....	1.3
Flint.....	12.7	12.6	.....	.1
Grand Haven.....	3.	2.4	.....	.6
Ionia.....	6.6	14.7	8.1	.....
Jackson.....	12.4	3.2	.....	9.2
Kalamazoo.....	7.8	7.5	.....	.3
Lansing.....	8.8	10.4	1.6	.....
Manistee.....	16.5	20.6	4.1	.....
Marquette.....	5.4	13.6	8.2	.....
Marshall.....	6.7	14.2	7.5	.....
Muskegon.....	16.6	11.5	.....	5.1
Ypsilanti.....	13.	19.	6.	.....

For convenience in comparing the two items, the following table is given, showing the increase or decrease in the percentage of both public and private school attendance in such of the cities as report both these items for the two years included in the comparison.

Cities.	Increased Per Cent. of Public School Attendance in 1889 over 1880.	Decreased Per Cent. of Public School Attendance in 1889 from 1880.	Increased Per Cent. of Private School Attendance in 1889 over 1880.	Decreased Per Cent. of Private School Attendance in 1889 from 1880.
Adrian.....		8.3	6.8	
Ann Arbor.....		5.1		1.3
Battle Creek.....		18.2	3.2	
Bay City.....		7.4	12.8	
Big Rapids.....		9.5	12.1	
Detroit.....		9.2	3.3	
East Saginaw.....		5.1		1.3
Flint.....		2.3		.1
Grand Haven.....		4.9		.6
Ionia.....		4.2	8.1	
Jackson.....		6.9		9.2
Kalamazoo.....		12.7		.3
Lansing.....	1.4		1.6	
Manistee.....		4.3	4.1	
Marquette.....	.9		8.2	
Marshall.....	3.4		7.5	
Muskegon.....	16.8			5.1
Ypsilanti.....		33.4	6.	

The average decrease in the percentage of public school attendance in the above 18 cities from 1880 to 1889 is 7.4 per cent., while during the same period the percentage of attendance at private schools has *increased* 2.9 per cent.

COMPULSORY SCHOOL ATTENDANCE.

The statutory provisions in force providing for the compulsory education of children are included in chapters xx and xxi of the General School Laws of 1889, being act No. 144, Public Acts of 1883, and act No. 108, Public Acts of 1885, as subsequently amended. The act of 1883, which is generally referred to as the Compulsory School Law, consisted originally of thirteen sections. Act No. 108, Public Acts of 1885, repealed sections six, seven, eight, nine, ten and eleven, leaving but seven sections of the original act now in force. Section 8 of the act of 1883, which was repealed by the act of 1885, provided for the appointment of truant officers, whose duty it should be to assist in the enforcement of the provisions of the act. Section twelve of the original act, which was not affected by the amendments of 1885 and is still in force, provides as follows:

It shall be the duty of the officers detailed or appointed under the provisions of this act to assist in the enforcement thereof, to institute, or cause to be instituted, proceedings against any parent, guardian, or other person having legal charge and control of any child, or any person, company, or corporation, violating any of the provisions of sections one, two, three, four, and five of this act; and in school districts and cities, and villages of less than five thousand inhabitants, it shall be the duty of the school board to institute, or cause to be instituted, such proceedings.

The duty of instituting proceedings to enforce the provisions of the act in cities or villages of over five thousand inhabitants is placed upon certain officers who have no legal existence. There are no "officers detailed or appointed under the provisions of this act," as stated in the above section.

Section one, which is the essential feature of the act, provides "that every parent, guardian, or other person, in the State of Michigan, having control and charge of any child or children between the ages of eight and fourteen years, shall be required to send such child or children to a public school for a period of at least four months in each school year," etc., but the force of this provision is lost from the fact that no penalty is imposed for its violation. There are other marked defects and inconsistencies in this law that combine to render its enforcement impracticable. The act should either be repealed or made effective by harmonizing conflicting sections, providing suitable penalties and designating definitely whose duty it shall be to institute proceedings against persons violating its provisions.

With a view of ascertaining what per cent. of the children in the State, between the ages of eight and fourteen years, were enrolled in the public schools, in the blanks furnished school district and township officers for the past year, the number of such children in the district and the number that attended school were required to be returned. From these reports the following table has been compiled, showing these two items by counties. A few cities, which are noted on the table, failed to report these facts.

PUBLIC INSTRUCTION.

Counties.	No. of Children Between 8 and 14 years in the County.	No. of Children Between 8 and 14 years Attend- ing School.	Counties.	No. of Children Between 8 and 14 years in the County.	No. of Children Between 8 and 14 years Attend- ing School.
Totals.....	253,401	212,924	Ionia.....	4,508	3,858
Alcona.....	639	596	Iosco.....	1,796	1,246
Alger.....	118	108	Iron.....	457	393
Allegan.....	5,424	4,942	Isabella.....	2,688	2,461
*Alpena.....	688	489	Isle Royal.....	.....	.....
Antrim.....	1,388	1,248	§Jackson.....	2,955	2,817
Arenac.....	747	694	Kalamazoo.....	5,074	3,861
Baraga.....	488	466	Kalkaska.....	685	621
Barry.....	3,160	3,063	**Kent.....	6,287	5,580
Bay.....	6,193	4,835	Keweenaw.....	424	364
Benzie.....	719	684	Lake.....	897	827
Berrien.....	5,224	4,879	Lapeer.....	4,504	4,198
Branch.....	3,157	3,060	Leelanaw.....	1,125	1,051
Calhoun.....	5,358	4,512	Lenawee.....	5,813	5,182
†Cass.....	2,213	2,160	Livingston.....	2,565	2,445
Charlevoix.....	1,353	1,238	Luce.....	208	184
Cheboygan.....	1,565	1,387	Mackinac.....	924	698
Chippewa.....	1,466	1,292	Macomb.....	4,839	3,284
Clare.....	835	766	Manistee.....	4,808	2,635
Clinton.....	3,450	2,988	Manitou.....	144	112
Crawford.....	315	249	Marquette.....	4,680	3,761
Delta.....	1,903	1,802	††Mason.....	1,171	1,056
Eaton.....	4,139	3,873	Mecosta.....	3,891	2,881
Emmet.....	1,090	945	Menominee.....	2,609	2,134
Genesee.....	5,454	4,904	Midland.....	1,523	1,376
Gladwin.....	835	859	Missaukee.....	523	494
Gogebic.....	822	766	Monroe.....	4,397	3,544
Grand Traverse.....	1,731	1,599	Montcalm.....	4,781	4,441
Gratiot.....	3,959	3,723	Montmorency.....	185	166
‡Hillsdale.....	3,080	2,918	Muskegon.....	5,944	5,379
Houghton.....	4,401	3,526	Newaygo.....	2,647	2,375
Huron.....	4,675	3,629	Oakland.....	4,556	4,372
Ingham.....	4,666	4,267	Oceana.....	2,144	1,995
			Ogemaw.....	604	559

*Alpena city not reported.

†Dowagiac city not reported.

‡Hillsdale city not reported.

§Jackson city not reported.

**Grand Rapids city not reported.

††Ludington city not reported.

Counties.	No. of Children Between 8 and 14 years in the County.	No. of Children Between 8 and 14 years Attend- ing School.	Counties.	No. of Children Between 8 and 14 years in the County.	No. of Children Between 8 and 14 years Attend- ing School.
Ontonagon	888	823	St. Joseph	2,987	2,881
Osceola	2,197	2,043	Sanilac	5,099	4,664
Oscoda	194	167	Schoolcraft	834	820
Otsego	586	499	††Shiawassee	3,154	2,741
Ottawa	5,691	4,971	Tuscola	4,601	4,258
Presque Isle	762	526	Van Buren	3,884	3,730
Roscommon	268	239	‡‡Washtenaw	3,854	3,447
Saginaw	11,476	10,093	Wayne	29,469	17,167
St. Clair	7,381	5,721	Wexford	1,465	1,309

††Owosso city not reported.
‡‡Ann Arbor not reported.

From the foregoing table it appears that there were in the State, outside of the cities noted, 253,401 children between the ages of eight and fourteen years. Of this number 212,924, or 84 per cent., were enrolled in the public schools. Of the total enrollment in the public schools, 53 per cent. are reported as being between the ages of eight and fourteen. Assuming that the same per cent. obtains in the private schools as reported, there would have been a private school attendance of 18,107 between the above mentioned ages. This would give a total attendance at both public and private schools of 231,031, or 91 per cent. of the total number of children in the State between eight and fourteen years of age. If the above figures are even approximately correct, it would appear that but a small per cent. of the children of the ages covered by the compulsory attendance law failed to receive some schooling during the past year.

FREE TEXT-BOOKS.

The most important legislation affecting the public schools enacted at the last session of the Legislature was the passage of Act No. 147, empowering school districts to purchase text-books on certain subjects for the use of pupils in the schools of the districts. The following is the text of the bill:

ACT NO. 147, PUBLIC ACTS OF 1889.

SECTION 1. *The People of the State of Michigan enact:* That from and after June 30, 1890, each school board of the State shall purchase, when authorized, as hereinafter provided, the text books used by the pupils of the schools in its district in each of the following subjects, to-wit: Orthography, spelling, writing, reading, geography, arithmetic, grammar (including language lessons), national and State history, civil government, and physiology and hygiene; but text books once adopted under the provisions of this act shall not be changed within five years: *Provided,* that the text book on the subject of physiology and hygiene must be approved by the State Board of Education, and shall in every way comply with section fifteen of act number one hundred and

sixty-five of the public acts of eighteen hundred and eighty-seven, approved June 9, 1887: *And provided further*, That all text books used in any district shall be uniform in any one subject.

SEC. 2. The district board of each school district shall select the kind of text books (on subjects enumerated in section 1) to be taught in schools of their respective districts. *Provided*, That nothing herein contained shall require any change in text books now in use in such district. They shall cause to be posted in a conspicuous place, at least ten days prior to the first annual school meeting from and after the passage of this act, a notice that those qualified to vote upon the question of raising money in said district shall vote at such annual meeting to authorize said district board to purchase and provide free text books for the use of the pupils in said district. If a majority of all the as above provided voters present at such meeting shall authorize said board to raise by tax a sum sufficient to comply with the provisions of this act, the district board shall thereupon make a list of such books and file one copy with the township clerk and keep one copy posted in the school, and due notice of such action by the district shall be noted in the annual report to the Superintendent of Public Instruction. The district board shall take the necessary steps to purchase such books for the use of all pupils in the several schools of their district, as hereinafter provided. The text books so purchased shall be the property of the district purchasing the same, and shall be loaned to pupils free of charge, under such rules and regulations for their careful use and return as said district board may establish: *Provided*, That nothing herein contained shall prevent any person from buying his or her books from the district board of the school in which he or she may attend: *Provided further*, That nothing herein contained shall prevent any district having once adopted or rejected free text books from taking further action on the same at any subsequent annual meeting.

SEC. 3. It shall be the duty of the district board of any school district adopting free text books provided for in this act to make a contract with some dealer or publisher to furnish books used in said district at a price not greater than the net wholesale price of such books: *Provided*, That any district may, if it so desires, authorize its district board to advertise for proposals before making such contract.

SEC. 4. The district board of every school district in the State adopting free text books under this act shall make and prepare annually an estimate of the amount of money necessary to be raised to comply with the conditions of this act and shall add such amount to the annual estimates made for money to be raised for school purposes, for the next ensuing year. Said sum shall be in addition to the amount now provided by law to be raised; which amount each township clerk shall certify to the supervisor of his township to be assessed upon the taxable property of the respective districts as provided by law for raising the regular annual estimates of the respective district boards for school purposes, and when collected shall be paid to the district treasurer in the same manner as all other money belonging to said district is paid.

SEC. 5. On the first day of February next after the tax shall have been levied, the director of said district may proceed to purchase the books required by the pupils of his district from the list mentioned in section one of this act, and shall draw his warrant, countersigned by the moderator, upon the treasurer or assessor of the district for price of the books so purchased, including the cost of transportation.

SEC. 6. If the officers of any school district, which has so voted to supply itself with text books, shall refuse or neglect to purchase at the expense of the district for the use of the pupils thereof, the text books as enumerated in section one of this act, or to provide the money therefor as herein prescribed, each officer or member of such board so refusing, or neglecting, shall be deemed guilty of a misdemeanor, and upon conviction thereof before a court of competent jurisdiction, shall be liable to a penalty of not more than fifty dollars or imprisonment in the county jail for a period not exceeding thirty days, or by both such fine and imprisonment, in the discretion of the court: *Provided*, That any district board may buy its books of local dealers if the same can be purchased and delivered to the director as cheap as if bought of the party who makes the lowest bid to the district board: *Provided further*, That school districts in cities organized under special charters shall be exempt from the provisions of this act, but such districts may, when so authorized by a majority vote of their district boards, submit the question of free text books to the qualified voters of said districts. If a majority of the qualified electors vote in favor of furnishing free text books, such district boards shall have the authority to proceed under the provisions of this act.

Approved June 15, 1889.

The act making it mandatory upon the voters of every school district excepting such as are organized under special charter, to vote upon the

question at the first annual meeting after its passage, and requires the district board to give notice of the fact that such vote would be taken, the following circular was issued from this department to the director or clerk of each school district in the State calling his attention to his duties in this regard :

Lansing, July 1, 1889.

To the Director or Clerk of School Board :

Below is the text of the Free Text Book law, passed at the session of the Legislature just closed. By the provisions of Sec. 2, it is made the duty of the district board in all districts, excepting in cities organized under special charters, to "*cause to be posted in a conspicuous place, at least ten days prior to the first annual school meeting from and after the passage of this act, a notice that those qualified to vote upon the question of raising money in said district, shall vote at such annual meeting to authorize said board to purchase and provide free text books for the use of the pupils in said district.*"

It is further made the duty of the board in case the district authorize them to provide free text books, to give notice of such action in the annual report to the Superintendent of Public Instruction.

As the act was given immediate effect, it will be your duty to see that the question of providing free text books shall be voted upon at the coming annual meeting in your district, unless organized under special charter.

Very respectfully,

JOSEPH ESTABROOK,
Superintendent of Public Instruction.

The arguments advanced by the advocates of free text books have been fully presented in the reports of this Department for several years past, and there is no necessity for repeating them. The Legislature has inaugurated the plan, and the experience of a few years will demonstrate its value to our educational system. That the plan will grow in popular favor as it has wherever tried, I do not doubt. An indication of the growth of public sentiment in favor of the system is shown by the fact that while the action of the Legislature of 1887 on a bill providing for free text books was limited to a favorable report from the committee on education in the Senate, the last session adopted it by the decisive vote of 22 to 1 in the Senate, and 78 to 4 in the House.

It will be noticed that the bill requires the director of any district adopting free text books to note the fact on his annual report to this office. An examination of these reports reveals the astonishing fact that *520 districts* voted for free text books at their last annual school meeting. When it is remembered that but two years ago the measure had such weak support that it was impossible to bring it to a vote in either branch of the Legislature, the fact that more than 500 districts should adopt the plan at the first opportunity certainly indicates that it has been gaining friends rapidly. One good result is reasonably certain to follow this action, and that is uniformity of text books in many districts that have previously been cursed with the evil of diversity.

The following table gives the number of districts in each county that voted at their last annual meeting to furnish free text books:

Total.....	520	Keweenaw	--
Alcona	4	Lake.....	8
Alger.....	1	Lapeer.....	1
Allegan	7	Leelanaw	8
Alpena.....	1	Lenawee	7
Antrim.....	11	Livingston	1
Arenac	1	Luce	5
Baraga.....	5	Mackinac	8
Barry	--	Macomb	4
Bay.....	8	Manistee.....	6
Benzle	8	Manitou	--
Berrien	6	Marquette	16
Branch.....	2	Mason	18
Calhoun	5	Mecosta	11
Cass.....	8	Menominee	9
Charlevoix.....	9	Midland	9
Cheboygan.....	7	Missaukee.....	14
Chippewa.....	8	Monroe.....	4
Clare.....	6	Montcalm.....	9
Clinton.....	5	Montmorency	8
Crawford	17	Muskegon.....	8
Delta.....	1	Newaygo.....	21
Eaton	8	Oakland	1
Emmet	11	Oceana	5
Genesee.....	8	Ogemaw	8
Gladwin.....	6	Ontonagon.....	2
Gogebio	2	Osceola	20
Grand Traverse.....	6	Oscoda	8
Gratiot	6	Otsego	11
Hillsdale.....	1	Ottawa	11
Houghton	2	Presque Isle.....	11
Huron.....	9	Roscommon	8
Ingham	--	Saginaw	19
Ionia	2	St. Clair	4
Iosco	5	St. Joseph.....	6
Iron	2	Sanilac.....	7
Isabella.....	1	Schoolcraft.....	1
Isle Royal.....	--	Shiawassee.....	2
Jackson.....	2	Tuscola	8
Kalamazoo	8	Van Buren.....	4
Kalkaska	18	Washtenaw.....	4
Kent	10	Wayne.....	2
		Wexford	21

SCHOOL LAW.

The only legislation affecting the general school laws, besides the passage of the bill providing for free text books, which is referred to elsewhere in this report, adopted at the last session of the Legislature, was the passage of a bill amending section 16 of chapter 4 of the general school laws, by requiring the supervisors of townships in which a fractional district is situated to include the proportion of the mill tax to be placed on their respective assessment rolls.

An effort was again made at the last session of the Legislature to secure the passage of an act providing for the adoption of the township school district. Bills were introduced in both the Senate and House authorizing the voters of any organized civil township to vote upon the question of placing all the schools of the township, excepting the larger graded schools and such as are organized under special charter, under the control of a township board of education. The House bill was favorably reported by the committee on education, but was lost in the House by a vote of 36 to 51. The defeat of the bill was due largely to the persistent opposition of the State Grange and local Granges throughout the State. Several members who voted against the measure expressed themselves as personally in favor of it, but the prevailing sentiment of their constituents being against it they felt constrained to oppose it.

The Senate bill was held in committee awaiting the action of the House, and although it was finally reported favorably in the Senate it was too late in the session to secure further action upon it.

The measure was most ably and eloquently supported in the House by Hon. O. E. Aleshire of Berrien county, and his speech advocating the passage of the bill was conceded to have been one of the strongest made during the session.

Though the effort to effect this much needed change in our system of school organization is again deferred, the friends of the measure have reason to feel encouraged by the constantly growing sentiment in its favor, which will unquestionably ultimately result in its adoption.

A new edition of the general school laws was published during the year, the edition of 1885 having been exhausted. The present compilation contains all the laws at present in force relating to the public schools. The digest of supreme court decisions includes all decisions that have been handed down by the court to the date of publication. The opinions of Attorneys General that have from time to time been filed in this Department, are given as foot notes, with references to the section or sections containing the provisions of law covered by the decision.

CERTIFICATION OF TEACHERS.

County Certificates.

During the past year, 12,264 teachers' certificates were granted by county boards of school examiners, including 1,143 special certificates. Of the 15,979 persons who applied for county certificates, 206 received first grade certificates, 554 second grade, and 10,361 third grade. These figures indicate a fairly satisfactory increase over the previous year in the number of higher grade certificates granted, though the continued large excess of third grade certificates implies an absence of that professional pride among the teachers in general which impels to the attainment of a higher standard. This condition is undoubtedly principally due to the fact that a large majority of the teachers, especially in the district schools, enter upon the work of teaching as a temporary makeshift, and consequently lack that interest and enthusiasm in their work that would obtain if they intended to follow teaching as a permanent occupation.

Another serious obstacle to a more general disposition to work for a higher grade certificate, is the uncertainty of the teacher's tenure of office. In too many districts the position of teacher is looked upon as a perquisite attaching to the office of the director and is disposed of by him as a reward for some personal or political favor, the welfare of the children or the success or ability of the teacher being of secondary consideration. While under the law the director has no more voice in the selection of the teacher than the other members of the district board, in many cases he assumes the sole control, and, in direct violation of law, and without regard to the rights or wishes of his associates, appoints whomsoever he pleases as teacher. Where this condition exists, it is soon discovered by the teacher, who, naturally perhaps, gives more attention to securing the personal good will of the director than to professional study. The evils of too frequent changes of teachers are varied and far-reaching in their results, and one of the most satisfactory results of the law providing for county supervision, is the very general efforts being made by the secretaries of county boards of examiners throughout the State to secure the employment of teachers for the school year instead of for the term. In many counties the labor of the secretaries in this direction is already producing a healthy change of sentiment, and I am convinced that the policy of lengthening the tenure of office of teachers will be followed by a pronounced increase in the number of applicants for higher grade certificates.

The plan of examination of teachers in operation in New York contains a restrictive provision regarding the granting of the lowest grade certificate.

Certificates of the third grade run for six months, are renewed only upon examination, *and can be issued to the same person only twice*. Supt. Draper in his report for 1888 says: "If in the course of a year's experience the teacher cannot progress sufficiently to secure a second grade certificate, it is believed that he has misapprehended his calling and will be likely to succeed better at some other employment." Hence the clause quoted above limiting the number of third grade certificates. Second grade certificates run for two years and are issued and renewed only upon examination. First grade certificates run for five years and are renewable *in the discretion of a commissioner without examination*. Temporary permits, corresponding to our special certificates, are granted without examination, to meet emergencies.

It will be observed that the general plan is very similar to our system of county examinations, the essential differences being in the duration of a third grade certificate and its limitation; in the authority given a commissioner to renew a first grade certificate without examination, and the granting of temporary permits without examination. With these differences in mind a comparison of the relative number of certificates of the different grades issued in New York and Michigan during the last school year is significant. The following table gives these facts:

	New York.	Michigan.
Whole number of regular certificates granted, 1889.....	14,804	11,121
Number of first grade certificates granted, 1889.....	801	208
Number of second grade certificates granted, 1889.....	5,005	554
Number of third grade certificates granted, 1889.....	8,498	10,361
Per cent. of first grade to whole number issued.....	.06	.02
Per cent. of second grade to whole number issued.....	.36	.05
Per cent. of third grade to whole number issued.....	.59	.93

Assuming that the requirements on examination for the several grades of certificates are as severe in one State as in the other, which is probably the case, the above comparison is far from favorable to the relative professional standing of Michigan teachers. Of course the above figures do not in either case include the teachers of city schools, and are confined almost exclusively to teachers in the ungraded and smaller graded schools.

The large number of second grade certificates issued in New York is unquestionably due to the provision above noted restricting the renewal of the lowest grade certificate. The results following the adoption of this requirement are thus referred to by Supt. Draper in his report for 1889:

“The moral or indirect results growing out of the undertaking have been far greater than were ever thought of in advance. It has aroused activity and stimulated the entire school work throughout all the rural districts of the State. Teachers have been at work as never before. They are advancing in technical knowledge; they are investigating and improving in their methods of teaching; they are broadening in their knowledge of affairs and in general culture; they are being put upon their own merits; they are seeing the necessity of progress; they are beginning to realize that the most progressive teachers will have preferment, and they are striving for advancement and are advancing.”

Some incentive to induce more of our teachers to strive to attain to something higher than a third grade certificate is certainly needed. Whether or not a compulsory feature in the law limiting the number of third grade certificates to any one teacher is the best remedy, I am somewhat in doubt. The results attained in New York, as stated by Dr. Draper, are much to be desired, and the suggestion is worthy of careful consideration. If any legislation of this character is undertaken, it should be supplemented by some provision fixing the shortest term for which a teacher can be employed. If teachers are required to better prepare themselves for their work, some provision should be made to secure them in any positions they may have obtained and hold by virtue of their ability as teachers.

State Certificates.

One section of Act No. 194, Public Acts of 1889, changes very materially the regulations heretofore in force governing the issuing of State certificates. The section referred to is as follows:

SEC. 15. Said board (State Board of Education), shall hold at least two meetings each year, at which they shall examine teachers, and shall grant certificates to such as have taught in the schools of the State at least two years and who shall, upon a thorough and critical examination in every study required for such certificate, be found to possess eminent scholarship, ability, and good moral character. Such certificate shall be signed by the members of said board, and be impressed with its seal and shall entitle the holder to teach in any of the public schools of this State without further examination, and shall be valid for life unless revoked by said board. No certificate shall be granted except upon the examination herein prescribed: *Provided*, That graduates of the literary and scientific departments of the University and of incorporated Colleges of the State, shall not be required to teach as a preliminary to taking such examination and certificate.

Under the rules adopted by the Board each applicant is required to pass examination in orthography, reading, penmanship, arithmetic, algebra, geometry, grammar, geography, United States history, general history, civil government, theory and art of teaching, physics, physiology and hygiene, botany, zoölogy, geology, chemistry, rhetoric, general literature, and the school law of Michigan.

The important changes embodied in the above section are: 1. Making the certificate valid during the life of the holder. 2. Issuing no certificates except upon examination. 3. Exempting graduates from the literary department of the University and of incorporated Colleges from the provision requiring previous experience in teaching.

It is expected that the fact that a State certificate is a life certificate of qualification to teach in Michigan will stimulate more teachers to prepare themselves for the examination. For several years but very few applicants have taken the State examination. Since the passage of Act No. 231, Public Acts of 1879, authorizing the State Board of Education to grant State certificates, only 43 certificates have been issued on examination, the number for each year being as follows:

1880.....	3	1885.....	1
1881.....	5	1886.....	18
1882.....	4	1887.....	0
1883.....	1	1888.....	6
1884.....	1	1889.....	4
Total.....			43

This number is exceedingly small in comparison with the total number of teachers in the State and is much less than in most of the older States. It is somewhat difficult to find a satisfactory explanation for this. The examinations are not, as a whole, more rigid nor the requirements more exacting in Michigan than in other States, nor do I believe there are proportionately fewer teachers capable of passing the examination. The cause is undoubtedly due to a lack of a sufficient incentive to undertake the work necessary to prepare for the State examination. As stated above, it is to be hoped that the extra inducement offered by making the certificate valid during the life of the holder, will have a tendency to gradually increase the number of applicants for State certificates.

The question of recognizing life certificates issued in other States has been brought to my attention during the past year. State Superintendents Draper and Hancock, of New York and Ohio respectively, have written to this Department proposing to indorse State certificates issued in Michigan, thus authorizing teachers from this State holding such certificates to teach in either of these States without examination, provided a similar recognition was accorded in Michigan to life certificates issued in these States. The plan seems to me an eminently wise one, and I should have most heartily acceded to the proposition had this Department been vested with authority to do so. In this State the statutes specifically define who shall constitute a qualified teacher, and in the absence of any provision

authorizing this Department to waive any of the specified requirements for qualification, I was obliged to decline the offers made by these gentlemen. I would recommend such additional legislation as will empower the Superintendent of Public Instruction to endorse life certificates from any State when upon thorough investigation he is satisfied that the requirements as to scholarship, professional ability and experience are equal to the requirements in our own State, provided that the same privilege is extended to persons holding like certificates granted in Michigan.

SCHOOL HOUSES AND THEIR SURROUNDINGS.

The estimated valuation of the public school property of the State is \$13,386,637, and there was expended during the past year for buildings and repairs the sum of \$641,661.48. These sums represent the voluntary contributions of the citizens of Michigan for providing proper accommodations for the more than 400,000 children enrolled in the public schools. The right of the State to require its children to attend school, either public or private, assumed by the passage of laws relating to compulsory education, carries with it the duty of furnishing healthful and comfortable school accommodations for such children. That the people recognize this duty is shown by the millions invested in school property as given above. It is but fair to assume that the intent and purpose of this munificent expenditure of money is to furnish buildings and surroundings that will be adapted to preserve and foster the physical and moral health of the children. Unfortunately these conditions are too often entirely ignored, or sacrificed to architectural display. Of the 7,000 school houses in the State less than one-third are reported as properly heated and ventilated. This condition of affairs is not entirely or even largely the fault of the people nor of the officers directly charged with the duty of constructing the buildings. Until in recent years the necessity of giving special attention to proper methods of heating and ventilating has not been given very general consideration. For the past few years, however, this matter has become an important element in the preparation of plans for school houses in the cities of the State, and it is gratifying to note that the era of expensive buildings of abnormal height, showy exteriors, located and arranged with little thought to the necessities or comfort of the young people who are to inhabit them, has passed away in most of our cities, and the modern school house is substantially but plainly built, located with a view of accommodating the greatest number of children and constructed in a manner to secure the comfort and well-being of the pupils.

In the rural districts, however, the old system largely prevails. As a rule, the district school house is poorly heated and ventilated. The temperature

of the room is unequal, and either the teacher is uncomfortably warm and the children in the farther part of house correspondingly cold, or the conditions are reversed. The air is breathed over and over again until from sheer necessity a door or window is opened, and pure air is secured at the expense of the health of some unfortunate victim or victims whose location in the room subjects them to a direct draft of cold air. One reason for this condition is the difficulty in adopting any plan that will secure an even distribution of heat together with effective ventilation, that is inexpensive enough to be adapted to the ordinary district school. Again, but comparatively few architects have solved this most important feature in building, especially in connection with structures of moderate cost. To assist in securing better results along this line, I hope to be able to issue during the coming year a pamphlet of plans for school houses suitable for rural districts and smaller graded schools, embodying the latest and most improved methods of heating and ventilating. This Department is constantly in receipt of requests from school officers for plans for new buildings and for suggestions as to the best practicable means of improving the sanitary condition of those already built.

I feel constrained in this connection to refer to a condition of affairs that is far too prevalent, and for the continuance of which the district officers can justly be held responsible. I allude to the shameful condition of the out buildings attached to the school houses in many districts. Frequently but one building is provided for both sexes, and the boys and girls use it indiscriminately. Or, what is scarcely less disgraceful, the buildings are placed in close proximity to each other without any permanent barrier between them. The effect of such a state of affairs upon the moral tone of the pupils and the terrible results that are likely to follow are too patent to any one whose sense of decency is not entirely lost, to need even a statement. That they are allowed to exist is a sad commentary on the moral tone of a community, and implies, at least, a criminal negligence on the part of those school officers who permit it. I most earnestly urge county secretaries to use their best endeavors to secure a reform in this matter wherever necessary.

The legislature of New York recognized the existence of this evil, and at the session of 1887 passed the following act, entitled "An act in relation to health and decency in the school districts of this State."

SECTION 1. From and after the first day of September, eighteen hundred and eighty-seven, the board of education, or the trustee or trustees having supervision over any school district of this State, shall provide suitable and convenient water closets or privies for each of the schools under their charge, at least two in number, which shall be entirely separated from each other and having separate means of access, and the approaches thereto shall be separated by a substantial close fence not less than seven feet in height. It shall be the duty of the officers aforesaid to keep the same in a clean

and wholesome condition, and a failure to comply with the provisions of this act on the part of the trustees shall be sufficient grounds for removal from office, and for withholding from the district any share of the public moneys of the State. Any expense incurred by the trustees aforesaid in carrying out the requirements of this act shall be a charge upon the district, when such expense shall have been approved by the school commissioner of the district within which the school district is located; and a tax may be levied therefore without a vote of the district.

Similar legislation may be necessary to bring about the much needed reforms in this State.

EDUCATIONAL FUNDS.

The Primary School Funds.

The money derived from the sale of school lands, and from escheats to the State constitute the primary school fund proper, and bear seven per cent. interest. The moneys derived from the sale of swamp lands donated by congress, constitute the primary school five per cent. fund.

The interest derived from each of these funds, together with the surplus of specific taxes remaining in the State treasury after paying the interest on the several educational funds and the interest and principal of the State debt, forms the primary school interest fund, the entire amount of which, that may be on hand at the time, is apportioned to the school districts of the State semi-annually, between the first and tenth days of May and November in each year.

The condition of these funds on the thirtieth day of June, 1889, is shown by the following statement.

THE PRIMARY SCHOOL FUNDS.

Primary School 7 per cent. fund:

In the hands of the State June 30, 1889.. \$3,526,001 68

Due from purchasers of lands June 30, 1889 196,284 38

Total 7 per cent. fund June 30, 1889..... \$3,722,286 06

Primary school 5 per cent. fund:

In the hands of the State June 30, 1889.. \$793,358 42

Due from purchasers of lands June 30, 1889 14,032 96

Total 5 per cent. fund June 30, 1889..... \$807,391 38

Total school funds June 30, 1889..... \$4,529,677 44

PRIMARY SCHOOL INTEREST FUND.

Interest paid by the State on 7 per cent. fund. \$244,292 35

Interest paid by holders of lands on 7 per cent. fund..... 16,456 46

Total interest on 7 per cent. fund..... \$260,748 81

Interest paid by the State on 5 per cent. fund..... 39,434 15

Total income from both funds..... \$300,182 96

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Surplus of specific taxes transferred.....	\$522,200 33
Rent of land.....	1 00
Paid by trespassers on school lands.....	15 00
Total primary school interest fund.....	\$822,399 29

The University Fund.

The income derived from the University fund from July 1, 1888, to June 30, 1889, and the amount standing to the credit of the fund on the latter date, was as follows:

In the hands of the State June 30, 1889.....	\$513,280 12
Due from purchasers of lands June 30, 1889.....	32,666 35
Total fund.....	\$545,946 47
Interest paid by the State.....	\$35,724 53
Interest paid by holders of lands.....	2,894 01
Total income.....	\$38,618 54

The Agricultural College Fund.

This fund, derived from the sale of lands granted by the State and by the general government for the support of the College, draws 7 per cent. interest. The state of the fund at the close of the last fiscal year was as follows:

In the hands of the State June 30, 1889.....	\$357,619 20
Due from purchasers of lands June 30, 1889.....	97,016 87
Total fund.....	\$454,636 07
Interest paid by the State.....	\$24,551 32
Interest paid by holders of lands.....	6,836 64
Paid by trespassers on lands.....	124 75
Total income.....	\$31,512 71

The Normal School Fund.

This fund, bearing 6 per cent. interest, is derived from the sale of salt spring lands, granted by the State for the support of a Normal School. The condition of this fund and its income at the close of the last fiscal year was as follows:

In the hands of the State June 30, 1889.....	\$63,660 62
Due from purchasers of lands June 30, 1889.....	5,895 92
Total funds.....	\$69,556 54

Interest paid by the State.....	\$3,811 26
Interest paid by holders of lands.....	424 58
Total income.....	<u>\$4,235 84</u>

TEACHERS' INSTITUTES.

The institutes held during the year have, as a rule, been successful in the matter of attendance, and satisfactory in the character of the work done and results achieved. It is the policy of the Department to be governed largely by the suggestions of the county secretary in arranging the institutes, not only as to location and date, but in appointment of instructors. The ideal county secretary should be a person thoroughly familiar with the work of each teacher in the county; able to detect the weak points and to suggest the needed remedies. He should understand what special branches are most needed to be presented at the institute, and his advice in this regard can be of great assistance to the Department in selecting instructors who will best meet the needs of the teachers in his county. In many cases the secretary himself is capable of doing excellent Institute work, and in the sixteen counties where secretaries were appointed as instructors during the past year, their work was in nearly every case satisfactory and helpful to the teachers. Unfortunately, every county is not blessed with an ideal secretary, and in some cases it is deemed advisable not to conform to the suggestions offered. In some instances I have been requested to transfer the county institute fund to the county board of examiners, to be expended by them in their discretion. These requests have been uniformly denied, as the duty of arranging for the institutes and the responsibility for their success rests upon the Department, it would be manifestly improper to delegate this trust to any other person or persons. While the advice and suggestions of the county board, and especially the secretary, should always be accorded careful consideration and should largely influence the Department in arranging the details of the institute, the actual arrangements and the control of the fund should be left, where the law places it, with this Department.

In several counties of the State it has become the practice of late years for the county secretary, in connection with other members of the county board, or with teachers in the county, to hold a summer normal of three or four weeks' duration. I have been frequently solicited to appropriate a portion or all of the county institute fund to aid in the support of one of these summer normals on the ground that this course would enable the teachers to enjoy the benefits of a longer course of professional instruction. As it is

customary to exact a tuition fee from the teachers attending these summer schools, it would be manifestly improper to divert the institute fund to their support, and I have always declined to apply the fund for that purpose. While in some cases the instruction given at these schools may more than compensate the teachers for the time and money expended in attending, I very seriously question the propriety of this practice. The fact that the secretary practically has power to determine who shall teach in the county would naturally induce teachers to attend a school under his management, though convinced that the instruction given would be of little professional value, assuming that the mere fact of attendance would result to their advantage at the next examination. In some cases the secretary, in circulars advertising his summer normal, has announced that applicants for certificates as teachers at succeeding examinations would be credited with a certain percentage for attendance at the school. The effect of such a course will be, I believe, to weaken the influence of the secretary in his county, to create a suspicion that his motives are not altogether unselfish, and to suggest a possibility that personal interest may prove an important factor in the examination of applicants for certificates.

The provision of law requiring the payment of an institute fee applies to all teachers in the public schools. In several counties in the State a large portion of the institute fund is contributed by the teachers in the city schools. This is especially true in Wayne and Kent counties. The teachers of Detroit and Grand Rapids pay into the institute fund of these counties respectively more than one-half the total amount of the fund. The instruction given at the ordinary county institute is necessarily more closely related to the work of the district schools than of the higher graded schools. It follows that the teachers in the city schools have felt that they were not receiving the same returns for their investment in the institute fund as the teachers in the rural schools. Recognizing the fact that there existed some grounds for this complaint, I proposed to the city superintendents of Detroit and Grand Rapids to arrange for an institute in each of these cities in which the instruction given should have special reference to the needs of the teachers in the city schools. The proposition was accepted by Supt. Kendall of Grand Rapids, and arrangements were perfected for holding the institute during the week commencing August 26th. At the suggestion of Supt. Kendall, special consideration was given to Pedagogy, Geography and Language, and these topics were presented respectively by Dr. White, of Cincinnati; Prof. A. E. Frye, of Hyde Park, Mass., and Miss M. L. Cooper, of the Oswego Normal School. The sessions were well attended, over 300 being enrolled. The reputation of the instructors attracted teachers from

different portions of the State, and the attendance was not confined to the teachers of Kent county. In his annual report to the Board of Education, Supt. Kendall refers to the institute as follows:

“An institute organized especially for the teachers of this city was held the last week in August in the Central High School.

“This is the first city institute held in the State, the expenses of which were paid out of the county institute fund. This fund arises from the annual payment by each female teacher of fifty cents, and by each male teacher of one dollar, the same to be expended in a teachers’ institute, to be held for the benefit of the teachers of the county. The city teachers, and the candidates examined for positions in the city schools, contribute about \$140 annually to this fund; and heretofore they have received nothing in return for it, since the county institutes are usually held in the summer, in one of the smaller towns. * * *

“The attendance taxed to the utmost the capacity of the largest room in the High School, notwithstanding the oppressive heat of the entire week. Over 300 teachers were enrolled, and with a few exceptions the entire corps of city teachers was present.

“The interest manifested was all that could be desired, and it is not too much to say that every teacher present took up the work of the year with more than ordinary enthusiasm and energy.

“Dr. White’s able lectures on the Principles of Teaching, and on School Government were highly prized by all, while his talks on Moral Training will undoubtedly bear their fruit during the coming year. Mr. Frye’s lectures on the teaching of Geography created a new interest in this branch of study and gave an added impulse to the movement in the direction of more rational methods of teaching it—a movement begun two years ago and continued during the past year. Miss Cooper’s work in Language and Grammar convinced the teachers that they had been working along correct lines; her instruction was very helpful.”

In view of the marked success of the Grand Rapids institute, it is probable that similar institutes will be held in other cities the coming year.

Seventy-two institutes were held during the year, with a total enrollment of 6,597. In sixty institutes the sessions continued one week; seven two weeks’ institutes were held; three for three weeks, and two for four weeks. The total amount disbursed at the institutes was \$11,396.23, an average cost of \$124.57 for each week; \$9,478.76 was received from county institute funds and \$1,917.47 from the State fund.

COMPARATIVE STATISTICS.

In Table I the summaries of the important statistical items, gathered from the reports of the school inspectors for 1889, are compared with those of the previous year, and, on the whole, the showing is favorable to the interests of the schools.

The number of districts has increased 58, making 7,145 districts now in the State. Of this number 7,046 are reported as having maintained school, and the reports show that school was maintained in 33 districts more in 1889 than in 1888. The school census has increased 10,146. And a peculiar feature of this increase, and one that has been observed for four or five years, is that it all comes from the graded school districts. The entire number included in the school census was 640,069. The graded districts furnished 329,184 of these. There has for several years been a steady increase in the census of the graded districts over that of the ungraded districts. In 1887 the census of the graded districts was 49 per cent. of the whole census; in 1888 it was 50 per cent. of the whole, and in 1889 it was 51.4 per cent. of the whole census. The total enrollment in all the schools was 423,604, or 66.1 per cent. of the school census. The graded schools showed an increase of 3,285 in the enrollment, but this was overbalanced by the 4,899 decrease in the ungraded districts, so that the total gives a decrease in the enrollment of 1,614. By adding the 34,179 children reported as attending private schools, to the attendance in the public schools, the total attendance reaches 457,783, which is 71 5 per cent. of the school census.

The number of private schools reported was 312, which is an increase of eight over last year. The reports give 277 male teachers and 422 female teachers in such schools. There is a decrease of 21 teachers, and an increase of 3,106 pupils.

There was 503 graded school districts, with a total enrollment of 201,087, or an average of 654 pupils to each district. The table shows 6,642 ungraded districts, the total enrollment of which was 310,885 or an average of 46 pupils to each district.

The average duration of schools in the graded districts was 9.4 months. This is a decrease of .1 of one month. In the ungraded districts there is an increase of .1 of a month, making the average duration 7.6 months. The general average for the State is 7.7 months, an increase of .1 of a month.

The total number of teachers necessary to supply the schools of the State was 10,637. The graded schools required 4,017 and the ungraded took 6,620. The average number of pupils to each teacher was 39. The number

of teachers actually employed in the State was 16,075. The graded schools employed 4,201, only 184 more than was necessary to supply the schools, while the ungraded districts employed 11,874, which was 5,254 more than the schools required. By these statements it is seen that nearly every ungraded district in the State employed an average of two different teachers during the year. Of the teachers employed 3,681 were males and 12,394 were females.

There was a fair increase in the number of teachers required to supply the schools, the increase being 254. And there were 312 more teachers employed than in 1888. The gain was wholly with the female teachers. Last year there were 253 less male teachers employed than in 1886, and 92 less than in 1888. The decrease has been constant for the past three years. Of all the teachers employed in the State 22 per cent. were males, and 16 per cent. of the graded school teachers and 25 per cent. of those in the ungraded schools were men.

In 1889 the teachers in the public schools were paid \$3,192,574.85, which is \$130,482.50 more than was paid them the year before. The male teachers received \$929,658.26, or an average of \$46.31 per month for each teacher. An average per teacher of \$32.32 a month, or an aggregate of \$2,262,856.59, was paid in wages to the female teachers. There was a gain of 75 cents per month in the average monthly wages of the women, and a gain of 64 cents per month for the men.

The reports from the counties, respecting the examination and certification of teachers, show that 489 public examinations were held, at which there were 15,979 applicants for certificates. Of these applicants 11,121, or about two-thirds of them, were granted certificates. There were only 72 more applicants for certificates the past year than in 1888, but there were 959 more certificates granted. Care has been taken to keep the examination questions at as high, if not at a higher, standard than heretofore, and in a number of the counties the boards have raised the percentage of standing required for certificates. The fact that the number of applicants securing certificates increased under the strict care of the officers to keep the requirements up to a high degree of excellence tends to show that the teachers are becoming better qualified. Of the 11,121 certificates granted, 206 were first grade, an increase of 21 since 1888; and 554 were second grade, a gain of 56; and 10,361 were third grade, an increase of 882. Applicants for special certificates are growing less each year. The whole number in 1889 was 1,368, which is 566 less than the previous year. And the number receiving such certificates was 1,143, a falling off of 360. The number holding State or normal certificates, teaching in the schools under the supervision

of the county secretaries, was 403. The number of teachers licensed without previous experience in teaching was 2,399, or 346 more than in 1888.

The number of school houses reached 7,493, an increase of 65. In these houses there were sittings for 543,707 children. The school districts of the State own property valued at \$13,386,637.00, and this amount is \$529,534.00 greater than in 1888. These districts have a bonded debt of \$1,622,014.71, and their floating indebtedness reaches \$146,740.12. The total indebtedness equals 13.2 per cent. of the property valuation. The resources of the districts in 1889 amounted to \$6,368,734.62 and the net expenditures were \$5,280,409.08, leaving on hand \$1,088,325.54, or over one-half of the total school debt of the State.

Out of the 7,145 school districts, only 4,178 report dictionaries in the school, only 2,873 report maps, and but 2,070 have globes.

Under the law, every township should maintain a township library, but the reports show how slow they are to comply with the provision. There are 1,236 townships and cities reporting, and but 505 of them report libraries. There are 1,105 districts that maintain libraries, making in all 1,610 in the State. In these libraries there are 464,582 volumes, a gain of 24,605 over last year. There was paid for the support of libraries \$84,378.49, or \$10,462.29 more than was paid in 1888.

Very respectfully,

JOSEPH ESTABROOK,
Superintendent of Public Instruction.

REPORTS FROM SECRETARIES OF COUNTY BOARDS OF EXAMINERS.

ALLEGAN COUNTY.

I have the honor to submit for your consideration the following outline of work performed during the school year ending Sept. 2d, 1889:

At a meeting of the chairmen of the several boards of school inspectors of Allegan county, held August 7th, 1888, I was instructed to prepare a code of rules and regulations suitable for rural schools. I compiled a code such as, in the light of my experience and judgment, I considered suitable for this class of schools.

This code I submitted to some of our most practical and experienced teachers and school officers for their revision and approval. I then published the same in what I deemed a convenient form, and sent a sufficient number to supply each school district in each township in the county, to the chairman of each township, for distribution to the school directors.

In most cases the chairmen acted promptly, and put the code in the hands of the school directors at an early date, with the earnest request that they should be adopted promptly and enforced. The number of districts adopting this code in the county will be stated in the statistical table accompanying this report. I will say in passing that in every school that I have examined where this code has been adopted, I have found better order in the school, and I have received from school officers many statements to the same effect.

There are some school districts that have not yet adopted this code, and I shall endeavor to secure an adoption in these districts at the earliest opportunity.

At the time of the distribution of the code of rules to district officers, I also sent a copy of the course of study for country schools, to be used by the teachers. This course of study has been used by many of the teachers in the rural schools, and I am convinced from an examination of the schools where this course of study is used, that prompt action ought to be taken by school officers to insure its use in every rural school. It saves time, regulates the work, systematizes the exercises, furnishes an incentive to the pupils, allows more time for drill and recitation, enables a pupil to advance along a well arranged line of study, from term to term, and fits him to take up advanced branches in an academical school.

I have found as an obstacle to the use of this course of study that teachers fail to understand its use and do not comprehend its spirit. To remedy this defect as far as possible, we now require applicants to pass an examination on this course of study. Enough has already been accom-

plished to warrant me in saying that if this branch of work is pushed during the ensuing year that this course of study will come into general use in the rural schools. No valid objection can be urged against it, and the most cogent reasons exist favoring its general adoption.

In the supervision of the schools of the county, I have to report that during the school year I have made two hundred and fifty-seven visits to the schools, and have examined carefully into the discipline, the mode of instruction, and the progress and proficiency of the teachers and pupils, making a full record of the same for future use and reference.

Rev. J. F. Taylor, as assistant visitor, made forty-two examination visits to the schools and has reported on their condition in a similar way. The result of this visitation clearly shows a marked improvement in the quality of the work and methods of instruction in our rural schools over that of the previous years.

At the commencement of the spring term I sent to each chairman a blank report for each teacher of a rural school. These blanks were promptly distributed to the teachers of the several townships, and I am pleased to state that I have a certified report from every teacher of a rural school in this county, except three, of the items required in this blank. District No. 6 fr., and No. 8 fr. of Wayland township, and district No. 7 fr. of Manlius, did not send in their reports. School district No. 10 of Wayland, No. 10 fr. of Watson, No 6. of Salem, No. 6 of Lee, and No. 9 fr. of Gun Plains, did not maintain a school during the spring term.

There are 184 school districts in Allegan county. Deducting ten graded schools, three that did not report and six that did not maintain a spring term of school, and we have 165 rural schools reporting. At the cost of a good deal of labor I have compiled these reports and herewith submit a summarized statement of what they contain, for your consideration:

Number of boys enrolled.....	2,838
Number of girls enrolled.....	2,995
Total number of pupils enrolled.....	5,833
Total number of weeks taught.....	2,071
Total number belonging at close of term.....	5,16
Number withdrawn during term.....	687
Average daily attendance.....	4,176
Total wages paid.....	\$4,278
Average wages paid.....	\$25.92
Number of teachers that take an educational journal.....	121
Number of schools that use course of study.....	73
Number of schools that use code of rules.....	80
Number of schools that closed with rhetorical exercises.....	94
Number of schools that closed with a picnic.....	17

The number of children in the 165 districts, between 5 and 20 years of age is 9,216, and the total number enrolled in school during spring term 5,833, which is 63 per cent. of the census. Twelve per cent. of those enrolled during the term withdrew.

Three hundred and seventy-eight applicants have applied to the board for certificates to teach during the school year.

The board of examiners granted certificates as follows: Seven of the first grade, 31 of the second grade, 245 of the third grade, and 19 of the special

grade; total, 802. The rejections average 20 per cent. of the whole number of applicants during the year.

The whole number of teachers holding valid certificates are classed as follows: Normal school diplomas, 7; State certificates, 7; first grade certificates, 8; second grade, 47; third grade, 245; special grade, 19; total, 333.

One hundred and fifty-eight districts in this county now have uniformity of text books in each branch, as reported by the teachers at the time of the examination of the school. This is a gain of 38 over the number reported last year. This leaves only 26 districts without a uniformity, and the officers of these districts will be urged to make an adoption at once. No argument is necessary to show the advantages to be gained. With a uniformity in these districts our schools will have a complete uniformity.

Educational meetings have been held during the year as follows: Three in the township of Casco, one each in Allegan, Otsego, Martin, Salem, Monterey, Overisel, Fillmore, and a State teachers' institute at Douglas, attended by 115 teachers. These educational meetings have been well attended by our teachers, and the exercises have been interesting and instructive to teachers. They are encouraged by patrons and school officers, as they not only improve the teachers, but also awaken an interest in the work of the schools in the communities where they are held.

Seventy-five teachers from this county have enrolled as members of Hope College Normal at Holland City, where, under the instruction of able and experienced instructors, they are earnestly striving to improve themselves for the public school service.

I will report to you also as to the improvements in school buildings and grounds, that while something has been accomplished in this direction, much still remains to be done. I believe there is more of a sentiment among the people than heretofore to furnish additional and better facilities for the care and comfort of the children while in attendance at the rural schools. I shall foster and encourage this sentiment to the extent of my abilities among the people of the respective townships.

In closing, I will say that no person can examine impartially into the condition of our rural schools without being convinced that they are improving in the quality of instruction, modes of discipline, and that they are advancing along the line of better attendance and more systematic work. I feel that we should constantly keep before the minds of the patrons of these schools the fact that under proper arrangements there is no better place to educate a child in the first elements of knowledge than a good rural school. It is the general statement of instructors of our graded schools that their best pupils come from the rural schools. This is some evidence in their favor. Parents should remember that it costs much less to educate their children in the common branches in the rural school at home than to send them to villages, where they are exposed to many influences and temptations which are absent in the rural districts, and that their children have also the additional restraints of home and parental care so much needed at this period of life.

It is sometimes urged that only the brightest and most ambitious pupils go from the rural schools to take instruction in the graded schools, and hence these pupils are not an index of the quality of instruction in the country schools. In answer to this, I will say, that pupils go from the district schools to more advanced schools who have the means to pay their

way. Very many of the best pupils of the rural schools never go beyond the advantages of the rural schools for want of funds to meet their necessary expenses. So the argument fails. How necessary, then, that we do all in our power to increase the efficiency of these schools and awaken the people to an appreciation of their value in the first steps of educational training.

The great educator, Comenius, lays down the doctrine that "All the virtues, without exception, are to be implanted in youth." He also adds, "But, first of all, the primary or cardinal virtues have to be implanted, viz.: prudence, temperance, fortitude, and justice." Another says: "As an educator, the teacher's function is to develop, expand, and discipline the powers of the child." No one will contend that the elements of moral power do not exist in every child. Hence it follows that these powers should be the first to be strengthened and developed. Moral power is the basis of all right character.

Home culture and training should be the first to develop this power; but in too many instances, as we all know, the home environment is such as to impart no moral power and growth whatever. Therefore, we all can see how important a function in the formation of character the public schools ought to perform.

In this day of materialism, all classes are so intensely absorbed in gaining dominion over property that there is but little value placed on anything except it can be converted into dollars and cents. The generation that follows must inherit from the one that precedes it. How important, then, that our public schools should press to the fore front in all their exercises, the moral culture of the pupils that attend them.

I shall do all in my power to awaken among school district boards and teachers a new zeal and interest in this part of child training. Let us press this thought upon the people and the teachers, so that the children that follow us, and into whose hands shall fall the important trusts of the people, shall inherit at least principles of honesty, integrity, sobriety, industry, and a consciousness of moral responsibility.

Very respectfully,

P. A. LATTA,
Secretary.

ALPENA COUNTY.

I was elected in May last to succeed Rev. E. L. Little, and have visited all the schools in session during the period of my incumbency except four, remaining about a half a day in each, occupying most of the time in personally examining classes and conducting recitations. My ride extended 500 miles. I made a map of the grounds and plans of buildings visited. Nearly all buildings are new frame structures, nicely painted, well furnished, good grounds, cleared and fenced, fair blackboards, many of them having *genuine slate*, and a good grade of earnest teachers.

Only two buildings are supplied with a good ventilating apparatus. More, however, will soon be supplied.

The schools are rapidly progressing and constantly improving from year to year. We give the papers as close a rating as we dare to do in view of our need for teachers, and are obliged to issue specials often.

As confusion has arisen in many cases relative to the names of districts in the county, I have given you the number of schools. All the townships but two are union school districts, and one special district is carved out of two by special enactment.

Our teachers are nearly all women and quite young, and wisely marry as soon as suitable opportunity is presented. Hence any answer to No. 18 would be guess work. Four of them have taught 50 months or more, but even those may not be out of danger.

Considering the fact that the county is new and the people mostly poor pioneers, we consider the condition of our schools very good. The schools, of course, are mostly small and widely scattered in all parts of the county. The first school outside the city was started eighteen years ago, at which time and during the following eight years the undersigned was city superintendent here. We have been fortunate in having nearly all the time a good board of examiners, much of the time all college graduates, and what little work there was has been thoroughly done. At this writing a secretary for 1889-90 has not been elected.

In relation to ventilation. I have constructed a ventilating apparatus adapted to one-room buildings without basements (as well as to others), and have placed it in eighteen of the school rooms of the city and two in the country, and it is giving perfect satisfaction. Should you desire to examine it I will send you a description.

Very respectfully,

Your obedient servant,

F. S. DEWEY,

Secretary.

ANTRIM COUNTY.

Enclosed I hand you statistical report for Antrim county, Michigan, for 1888-9.

The schools of the county are generally in a prosperous condition. For the past year I have devoted considerable time in explaining the "course of study" sent out by your Department and in urging its adoption, and some of the schools are working in that line with good results. Many of our schools are very small, and the need of a systematic plan of work at present is not felt by them. On the whole, I am fairly satisfied with the advancement made by the schools during my term or terms of office, but still there is room for much improvement. I have endeavored to cultivate the true professional spirit in the mind of the teacher, and I think the good attendance at our last institute will warrant me in saying with some success. Our enrollment at the last institute was 60, and the average daily attendance 50.

I can not speak too highly of the work of Prof. H. King as conductor of the institute. It is the universal opinion here that he is the right man in the right place. Our average per cent. of correct answers required for a third grade certificate is higher than in some of the surrounding counties, and while it reduces the number of teachers to some extent, we believe that it has been beneficial to the schools and the teachers.

In some districts the adoption of a text book in physiology and hygiene has been slow, but there is a substantial growth in that direction.

School district No. 3 of Custer township, has had no school during this school year, for the reason that there are no pupils in the district to attend school.

Yours truly,

C. S. GUILLE,
Secretary.

BARAGA COUNTY.

I this day submit to you my statistical report as Secretary of the Board of School Examiners for Baraga county, and would respectfully report further that the several schools of this county are in a prosperous and flourishing condition.

A few of the schools are situated well out in the woods, principally among homesteaders, and these are of rather crude surroundings, and conducted in log school houses.

Aside from these few districts, the remainder are well furnished and equipped.

I have visited these several schools and made such recommendations as I thought best for the public interest, and am pleased to say that public sentiment is entirely in harmony with all school work in the county.

Yours very resp'y,

WM. L. MASON,
Secretary.

BARRY COUNTY.

In compliance with amendments to the school law of Michigan, Chapter XII, Sec. 9, I hereby submit the following report of the Barry county schools for the year ending Sept. 1, 1889:

This report follows the statistical report blank sent to the secretary of each county, making that report complete.

But two regular examinations were held in this county, and those at a great inconvenience; the school board of the city of Hastings does not allow examinations to be held in the public school building, therefore the teachers were examined in Union Hall, a place very unfit in every way.

The special examinations, four in number, were held at Middleville and Nashville, two at each place. The fee for rent of school building was but two dollars at each examination. These four specials, two in the spring and two in the fall, were sufficient and saved expense.

The number of applicants receiving certificates was two-thirds of the whole number at the public examinations. In Barry county there are about one hundred and fifty-eight teachers needed, and two hundred forty-six legally qualified.

The per cent. of correct answers is high enough, and this part of the teacher's qualification will need little attention for some time, but practical teaching should be shown all the attention possible.

We have a few first grade teachers left with us, but the greater part of teachers holding that class of certificate are called to other parts of the State. The majority of the second grade teachers stay in the county, and are doing good work, and you may be surprised at the large number of special certificates granted, but most of them were given teachers who had pre-

viously given good success, and who wanted to begin teaching before an examination had been held, or had not intended teaching.

As to the normal school instruction, it would be hard to tell just what is meant. We have had review classes in the county but I do not consider them as giving normal instruction.

I have been over the list and have given you the number of teachers making teaching a permanent occupation, as eighty; this means those teaching winter and summer.

There has been no trouble this year that my position has not enabled me to settle. Four teachers have been taken from schools during the year; one for want of tact; one for severity; one a common prejudice; and one an ungovernable temper. The three first were put into other schools and were successful, and are to teach the coming year. In a certain district there is trouble of which you are reported to have been informed. I have found on investigation that the teacher had nothing to do with it; it was a district quarrel and the teacher was suffering the consequence of being on neither side. I refer to No. 6 of Barry township.

I was not very successful in my attempt to establish township reading circles. I wanted to introduce the idea of reading some good work on history, theory and art of teaching, but failed to get general support from the teachers. A few of our teachers took up the work and felt well repaid for the effort.

The schools in general are poorly supplied with the conveniences of a school building. Blackboards are few and poor. Many districts are without dictionaries, maps or globes. The outbuildings are poorly constructed and in an unhealthy condition. Lack of shade trees is quite noticeable. Many districts still depend for water on springs and the wells of neighboring farmers.

In comparison with the schools of neighboring counties, I think Barry an average. Not the best nor yet the poorest.

An attempt to grade the schools was not a complete success. Many young teachers made fair progress in the work but the older ones are still inclined to the old way.

Our teachers fail to have system of arrangement of teaching ideas. They begin work without knowing the object of attainment. Pupils are questioned in an objectless manner. Too many things are undertaken, so making system or methods impossible. A few things taught systematically would accomplish the development of the child much quicker. All a district teacher's time had better be spent on language, reading, writing, geography and numbers, leaving the other branches for higher schools. The teaching of reading is particularly bosh among the district schools; pronunciation of a few words being the aim—and that is taught by memory of the teacher's pronunciation and not by a proper use of the dictionary.

The teachers need urging to accept new and improved methods, and yet there is little encouragement for them until their labor is lessened.

I am, very truly yours,

J. M. MATTHEWS,
Secretary.

BAY COUNTY.

I herewith present for your consideration a report of the doings of the Board of School Examiners, including myself as secretary, since its organization last year. The board has been harmonious in its action and earnest in its duties, and has steadily worked for the classification, improvement, and elevation of the schools of our county. The wisdom of our plans and the success that has attended our humble efforts, we submit to your consideration.

1st. We have endeavored to secure a better organization and classification of work, and, as far as possible, a uniform course of study throughout the schools of the county. To accomplish this, we placed in the hands of every teacher in the county a copy of the "Course of Study and Daily Programme for Country Schools," prepared and published by the Department of Public Instruction. In most cases it has been effectively used and has resulted in a decided improvement in school organization. Several of the leading schools of the county are already in line, are thoroughly graded on this system, while others are, as fast as circumstances will permit, bringing their schools up to this standard. It furnishes the teachers a uniform standard of excellence for which to work, and tends to secure uniformity in plans and efforts.

2d. To supplement this work, and the work of visiting the schools, and to obtain a closer knowledge of their condition and the progress made, special report blanks were prepared and sent to all the teachers of the county for a full report of their work from the opening of school to the Christmas holidays. These reports, besides the usual statistics, required a copy of the daily programme of recitation and study, the number of classes and the time allotted to each, the branches studied and the number of pupils in each branch, thus showing minutely the organization and workings of each school, its wants and its merits, and the progress made in systematizing the work.

3d. We have urged upon school officers the necessity of supplying their schools with maps, globes, and other apparatus, and in this we have been ably assisted by the township chairmen and many of the teachers. Some of our townships can boast that all of their schools are supplied with a *dictionary*, a *globe*, and *maps*, and others have made considerable progress in this direction. While much has been done in this line, much still remains to be done, and we confidently hope for still greater progress the coming year.

Respectfully submitted,

J. E. KINNANE,
Secretary.

BENZIE COUNTY.

I have made 103 visits to the schools of the county during the year, visiting in all 66 different teachers, 23 of whom were found in the same school throughout the year. I have found many encouraging things in my work this year. Some new school houses have been built, others have been repaired, grounds in many places have been improved, and much needed apparatus has been added to the schools. There are few districts in the county that have not done something in the way of improvement in school property. Still there is not enough improvement in this line. More

interest should be taken in fixing up school grounds and in making school houses attractive and pleasant. Both scholars and teachers will work with more interest and school houses would last much longer if repaired each year.

Our schools need:

1. School officers who will visit the school and study its needs, and when necessary coöperate with the teacher in matters of discipline.

2. Shorter vacations. Where a district has but three months of school and allows another three months to elapse before school commences again, the pupils spend half of the term getting where they left off at the close of the last term.

3. Teachers hired by the year instead of by the term. A frequent change of teachers is certainly detrimental to our schools. Teachers should be hired with the understanding that if they do good work they are to remain during the year. I believe our teachers generally are preparing themselves to do better work in the school room, and when a district will show proper appreciation of their efforts, and encourage them by visiting their schools, and by furnishing them with a school house with nice clean walls, plenty of blackboards, a dictionary, maps, globes, or whatever else is required for the best interest of the school, much better results may be expected from the work done in the school room, and I am sure there will be less frequent change of teachers.

MRS. ROSE WOODWARD,
Secretary.

BERRIEN COUNTY.

In compliance with statutory provisions, and your request, I hereby submit the annual statistical and manuscript report of the schools of Berrien county for the year ending Sept. 1, 1889.

Early in the school year just closed, the Course of Study issued by the Department of Public Instruction was forwarded to each director in the county, accompanied with a circular urging its adoption in their respective schools. I am glad to report that in many cases I found the teacher making good use of the excellent suggestions found therein, but am sorry to say, others were paying but little attention to it. What we need, and what we must have before the common schools will give us the entire scope of its possibilities, is a thoroughly graded system. And yet evidence is not lacking that with some a graded system is not desired, and is indirectly opposed by some, of whom we had hoped better things. If our efforts to inaugurate a complete system of gradation is a mistake, we have followed our conscientious convictions in the matter, which was produced by personal experience and observation. In order to establish a connecting link between the country schools and the high schools of the cities and villages of the county, and that each might grow and flourish and aid each other, I published a Teachers' Manual and Course of Study for the country schools, basing the outline on the text books most in use in the schools, which was unanimously recommended at the joint meeting of the chairmen of the boards of school inspectors, in August, for the adoption and use in the country schools of this county. The course of study is not intended to supplant the course sent out last year by the State department, but to aid in carrying out the plan more systematically and definitely. An arrangement has been made

with the superintendents of the high schools of the county that pupils who hold diplomas of graduation from the district schools can be admitted to any of the high schools of this county without examination. Also to the Benton Harbor Collegiate Institute.

Teachers of country schools are required to notify the secretary of the examining board two months previous to the time in which pupils desire to apply for diplomas of graduation from the district school. Examinations are held at such times and places as will best suit the parties interested, to be arranged by the teacher and county secretary. The examinations are public and conducted by one of the members of the board of school examiners, assisted by the teacher in charge. District No. 3, Pipestone township, is entitled to first honors, as having the first class to graduate under this plan.

Applicants for common school diplomas must pass a satisfactory examination in Orthography, Reading, Writing, Geography, Grammar and Composition, Arithmetic, U. S. History, Civil Government of State and Nation, Physiology and Hygiene. I am forced to believe that pupils will remain in school longer and attend more regularly when they realize there is an end to attain and an object to work for.

Term and yearly reports are required of all teachers, showing the attendance, tardiness, absentees, grades, census, enrollment, number expelled, number suspended, number withdrawn, etc. Teachers have invariably been prompt in making and forwarding these reports. A large majority of them are indicative of good work. Most of the teachers in the rural districts have been furnished with monthly report cards to assist them in their work.

I have urged teachers to make the classification a matter of record; one that is permanent, making it a living history for the examination of parents, pupils, and school officers, every step in the educational growth of each boy or girl in school.

All the districts have been visited during the past year by at least one of the members of the board of school examiners, except in a few cases in which school had closed before they could be reached. My visitations were hindered by a protracted sickness during mid-winter, which made it necessary to call to my assistance my worthy and efficient co-workers, Messrs. Crosby and Lawrence, for a short time.

A few teachers did not accomplish what was expected of them, and fewer failures exist this year than last. I regret that a few are neglecting all means of self improvement, and they feel wronged when their certificates indicate that they are retrograding. When teachers neglect to discuss questions of teaching with others, to attend the State Institute, especially when held in sight of their own homes, to make regular preparation out of school for the work in it, and neglect to read educational works, it is time to strike them from the list of teachers.

Each succeeding year brings a class of beginners, who have had no previous training whatever in the work. This is a great and perpetual drawback to our schools. I do not wish to argue for a moment against employing beginners. I think, however, they should be required, before being placed in charge of a school, to serve at least one month as an assistant with some experienced and competent teacher, or attend a training school for teachers.

The Benton Harbor Collegiate Institute, with its summer normal for

teachers, has done much to prepare the teachers and those intending to teach for their work, and will continue under the excellent supervision of Prof. Edgcombe, who is able and abreast with the most advanced, to be a fountain of inspiration to the student and teacher desiring to improve in general education.

In a great majority of our schools unexceptionably good work has been done. In a few instances inability to discipline or lack of experience in professional work has somewhat retarded the progress. But these troubles will occur as long as ladies will get married, and young untrained girls are employed to serve an apprenticeship at the teacher's desk. But, taking into consideration the great amount of work done, and the meager facilities for doing it, in many cases, our teachers, as a whole, have done nobly, and richly deserve commendation, and many of them a much larger pecuniary reward than they are now receiving.

In regard to the village and city schools of our county, in comparing them with other schools of like size in southwestern Michigan and northern Indiana, I believe that I am safe in saying that Berrien county can justly feel proud of the corps of superintendents in charge of her graded schools, whose tact, talents and results are second to none, irrespective of location. While our schools have not attained the standard of excellence to which we would have them reach, and our progress has not been all that we had hoped to report, we are encouraged by the fact that we have abundant evidence of advancement all along the line. Many of the teachers are earnest, studious and progressive, and are doing noble work. On these I build my hopes and belief that the years before us will be fraught with good results. So rich in promise and important in results are the interests of the schools that they demand the united action of all educational agencies in all that pertain to their progress, and should have such generous support for their improvement as wisdom will permit.

In behalf of the teachers of Berrien county, I wish to tender thanks to the State Department for the excellent selection made of instructors for the institute, held at St. Joseph this year. Never before was there such general interest manifested on the part of the teachers at an institute in this county. All voted that it was a decided success, and that the State Institutes were growing in usefulness each succeeding year.

The work done was practical and to the point. The lessons given by Miss Cuddeback were very beneficial to the primary teachers. The instructions given by Messrs. Briggs, Osinga and Bronson were most excellent, and duly appreciated and treasured by the teachers.

With this final report closes my official relations with the schools of Berrien county. And in conclusion I desire to acknowledge, with heartfelt gratitude, the love and confidence of pupils, the friendship of teachers, the emphatic repetition of kindnesses of the people and valuable aid received from the Department of Public Instruction, and especially to the local press for multiplied courtesies extended. To Messrs. Lawrence and Crosby, language fails to express my gratitude to them, who have been associated with me on the examining board for the past eight years, whose wise counsel I have often sought, which always proved to be correct. It is with the kindest feelings toward the appointing board that I surrender to my successor most cheerfully the responsibilities, anxieties and emoluments of the office; and I bespeak for my successor, Miss Rachel Tate, that encouragement

which has been so profusely bestowed upon me, who is in every way worthy the confidence reposed in her, and who I trust will keep the educational interest of the schools of Berrien county growing in excellence.

Though my labors have been arduous and oftentimes perplexing, and I refer with sadness to many shortcomings and mistakes, yet bright will ever be the memories of the associations and efforts of the past eight years, while serving as a member of the board of examiners or its secretary. Nowhere can I ever expect to find truer friends, nowhere more hearty coöperation, and never can I ask for more kindly encouragement than here in the grand old county of Berrien, the place of my nativity.

Respectfully yours,

CYRUS B. GROAT,

Secretary.

BRANCH COUNTY.

We are at the close of another school year, and as we take a retrospective view we can see many things that we have left undone. We also believe that many things relative to the prosperity and perpetuity of the schools of the county have been accomplished. That the prospects for better schools for the ensuing year are brighter than they were one year ago. That the teachers are more earnest, enthusiastic, and feel that they have a reputation to sustain as well as build. The work the past year has been of a varied nature. Visiting schools, holding township teachers' meetings, helping at the county teachers' meetings and State teachers' institute. We have conducted two regular and five special examinations. We have succeeded in accomplishing what we consider is a very important factor in the advancement and success of any school, in the advancement and success of any pupil, viz.: County uniformity of text books. Early in November last, after having visited every school in the county and ascertaining just what books were in use, we called a county meeting of the township boards of school inspectors. At this meeting, after a thorough examination of many different text books, and due consideration of the price, binding, size, quality, general make-up, and last and greatest of all, the matter contained in the book, the following list was recommended for use in the schools of this county:

Harper's New Readers, Harper's Geography, Reed and Kellogg's Grammar, Harper's Arithmetic, Harrington's Speller, Harper's Copy Books, Stoddard's Intellectual Arithmetic, Barnes' Brief History of the United States, Wright's Orthography, Smith's Physiology, Townsend's Civil Government, and Cocker's Civil Government of Michigan.

We find, as a rule, that the patrons are well pleased with the books that were recommended, and we now have in nearly every district in the county a uniformity of text books. Teachers will now be able to thoroughly classify their schools and systematize the work so that the pupil will be constantly advancing in the different branches that he is pursuing. We think all teachers should aim to have their pupils do a certain amount of work in each branch studied during the term, and also that there should be a symmetrical advancement in all of the different branches.

We would recommend the continuance of the local township teachers' meetings, as we believe them to be very beneficial. Those that we have held the past year have been largely attended, and the teachers present were full

of enthusiasm and exhibited a desire to become more proficient in their profession. During the past year many schools throughout the county have been supplied with school apparatus, such as globes, maps, charts, new black boards, etc. We are also pleased to be able to report the building of one new school house (brick), and the thorough repairing of five old ones. In regard to teachers, we would advise that, as far as possible, they be employed by the year. The thoroughness and success of our graded schools is largely due to this one fact. That we, as an American people, are becoming more interested in the education of the young, will be seen from the following report made by the Hon. N. H. R. Dawson, Commissioner of Education. He says: "The percentage of attendance has increased from 48.6 per cent. in 1876 to 64.6 per cent. in 1888." This increase of 16 per cent. in attendance in a period of twelve years certainly indicates a vast improvement. In union there is strength, and if each one of us will endeavor to do some one thing for the advancement of those around us, the next decade will show still greater results.

B. S. SPOFFORD,
Secretary.

CALHOUN COUNTY.

At the annual joint meeting of the Board of Examiners and the Chairmen of the Boards of School Inspectors, all of the townships in the county were represented excepting Convis, Lee, Marshall, LeRoy, Eckford, Albion, and Burlington.

After the election of S. G. Gorsline as a member of the Board of School Examiners for the next two years, the secretary made his annual report, giving a full account of the work of the past year.

In this report were recommendations for the adoption and use of a uniform series of text books in Calhoun county, which elicited any amount of discussion and occupied a large share of the time of the inspectors present. From this discussion the following thoughts were gathered:

1st. It will be a great saving of time and money if we can have a uniform series of text books throughout the county.

2d. The law requiring school boards to adopt text books for a period of five years is mandatory, and many school boards are waiting anxiously for the recommendation of a list of text books by the Examining Board or by some school committee.

3d. The inspectors should have some voice in the selection of the list, as they represent the several townships where the list is to be adopted.

The convention finally appointed a committee composed of C. C. McDermid, Battle Creek; H. A. Bunnell, Homer; Miss Janey Boyd, Albion, and the Examining Board, to meet as soon as possible and select a list of text books to be recommended to all the schools in the county. The committee per agreement met on the 29th of August and selected the following list:

Harper's Readers, Harrington's Speller, Robinson's Shorter Course in Arithmetic (revised in two books), Reed & Kellogg's Grammars, Harper's Geographies, Barnes' Brief History of the United States, Kellogg's Physiologies, Ostrander's Civil Government, Mayhew's Book-keeping, Harper's Copy Books.

FOR TEACHERS' USE.

Barnes' Language Lessons, Metcalf's Language Exercises, Chittenden's Elements of English Composition.

The books are published as follows:

PUBLISHERS.

Readers, Speller, Geographies, Physiologies, Copy Books, by Harper & Bros., 255 and 257, Wabash Ave., Chicago, Ill.

Arithmetics, Language Exercises, by Ivison, Blakeman & Co., 149 Wabash Ave., Chicago, Ill.

History, Language Lessons, A. S. Barnes & Co., 263 and 265, Wabash Ave., Chicago, Ill.

Grammars, Clark & Maynard, New York, 75 Wabash Ave., Chicago, Ill.

Civil Government, Geo. Sherwood & Co., Chicago, Ill.

Points for School Boards.

1st. Communicate with the principal publishing houses given in the above list and get their best terms before adopting any text books.

2d. Get a contract from each house agreeing not to increase the regular list price and to give you the benefit of all reductions by competition for a period of five years.

3d. Record the list adopted in the records of the proceedings of the board, post a copy of the list in the school room, and send a copy to the Secretary of the County Board of School Examiners.

4th. Before recommending the above list of text books, your secretary communicated with all the leading publishing houses and was assured of very satisfactory terms.

Statistics.

(The three cities are not included.)

No. of school districts, 160. (No. 4 fractional of Emmet is now in the city of Battle Creek, and No. 5 fractional of Sheridan and No. 6 of Marengo are united, forming district No. 5 fractional of Sheridan.) Number of school rooms, 172; number of teachers employed at any one time, 172; number of school houses, 162; number of school houses built during the year, 2; number of school houses repaired during the year, 8; number of public examinations held during the year, 8; number of applicants for certificates, 370; number of certificates granted during the year, 244. Institute fees collected, \$335.

Recommendations.

The school houses in No. 2 fractional of Pennfield, No. 1 of Marshall, No. 4 of LeRoy, No. 1 of Fredonia, No. 8 of Tekonsha, and No. 10 of Burlington, should be repaired at once or replaced by new houses as they are hardly fit for habitation. Many other school houses could be much improved and made more healthful and comfortable by repairing or replacing seats, cleaning, painting, papering and kalsomining.

The State course of study has been placed in each school room in the hands of the teacher with instructions to use the same and leave it with the register for his successor, when he leaves the school. He should also leave a list of the pupils properly graded that his successor may know where each pupil belongs in the course.

Please answer four questions. Have you Webster's Unabridged Dictionary? Have you a Map of Michigan? Have you a clock? Have you a live teacher?

If your teacher is not giving satisfaction by properly managing the school, by properly caring for the school room, school grounds, and school property, by having a healthy, moral influence over the pupils, report the matter to the examining board at once.

Teachers' Meetings.

Township meetings for teachers will be held as follows:

For Battle Creek, Bedford, Pennfield, and Emmet, at Battle Creek high school building, Saturday, October 12, 1889.

For Lee, Clarence, Sheridan, and Marengo, at Rice Creek, Saturday, Nov. 2, 1889.

For Convis, Marshall, Fredonia, Eckford, and Albion, in office of examining board at Marshall, Saturday, November 30, 1889.

For Tekonsha, Clarendon, Homer, and Burlington, at Tekonsha, Saturday, October 26, 1889.

For Athens, LeRoy, and Newton, at Athens, Saturday, November 16, 1889.

All teachers who teach during the coming winter term will attend one of these meetings.

School officers and patrons of schools are invited.

One or more members of the examining board will attend each meeting.

S. G. GORSLINE, *Chairman.*

LIZZIE M. COOK.

R. A. CULVER, *Secretary.*

CHEBOYGAN COUNTY.

In accordance with instructions I herewith transmit my annual report:

Three new frame school houses have been built in the county since the last report was submitted. They are all well built, and well seated; two of them are furnished with slate blackboards, and all are reasonably well equipped for work.

We now have but three school houses in the county that are not seated with some good patent seat.

During the past year many of our districts have furnished themselves with better blackboards, and have purchased more and better maps and other school aids.

District officers have been prompt in co-operating with the county board in desired changes, and the result has been better work and more of it.

Three meetings of the county teachers' association have been held, and good, earnest work done in them.

For the teachers of this county I tender hearty thanks to you for your kindness in sending such educators as Profs. Rankin and Graves to this

county as Institute instructors. Their work was good and was appreciated by our teachers, and I look forward with pleasure to the fruits which will be brought forth in the ensuing year as the result of such instruction.

All of which is respectfully submitted.

W. C. THOMPSON,
Secretary.

CHIPPEWA COUNTY.

In accordance with your request, I beg leave to offer the following manuscript report:

My county, embracing as it does an exceedingly large extent of territory, and being located in such an extremely "new" section, offers peculiar difficulties to *efficient* supervisory work in school matters.

Bad roads, *impassable* in many portions at most seasons, districts located at long distances apart, almost total isolation of districts, form some of the difficulties physical I find.

As an instance of the last named, there is one district, not over 30 scholars, which is sixty miles from here, and at least 46 from any other district. Accessible during the summer months (vacation time usually) by boat, requiring one day, practically, each way, and during the winter months by dog train from the railroad, thirty miles away. Add to this the total indifference of the powers that be of the district to my repeated requests for a little idea when their school will be in session, and you may have some idea of the difficulties physical I meet. As to the moral point, my pen fails me. I can't do justice to this part and won't try.

Our board has succeeded in very materially raising the standard of the teachers here and improving their pedagogical character. The special certificate course is now reduced to a minimum and will so remain, I think, during the incumbency of the present board. This county is filled with stumbling blocks—vicious and otherwise—who fail to see in our public school system the grandest of all our institutions. Coming as they do, at least nine-tenths of them, from another country, mostly from Canada, they look on the school as only a subordinate thing of exceedingly little value. Berries are worth more to them than brains.

The one great need in our county is the help we ought to get from the parents.

We have endeavored to secure some unanimity in our schools, but it is decidedly up-hill work. No one of the patrons seems to care particularly whether there are two similar books of the same grade on any subject in a given district or not.

The school houses are improving a little. There have been two new school houses built since last report, one frame, one brick. There is one township which has as yet not reported to me any school, nor can I find out whether or not there is one there. I refer to Trout Lake.

Now as to suggestions. There is one I would like to make. Should not the secretary be empowered to more thoroughly superintend the schools? I mean in the matters of locating the teachers, promoting, disqualifying teachers from teaching, securing uniformity of text books and courses and grades, and also in the matter of the securing accessories, *e. g.*, dictionaries, maps, etc.

Yours, etc.,

S. P. TRACY,
Secretary.

CLINTON COUNTY.

By a diligent visitation of the schools in this county, I have found that most of the common schools like those of the State and other States that lack the township district system, fail principally in being conducted without aim or system. This is a result of having no particular course of study and therefore no proper classification.

While the teachers have sufficient scholastic ability, they fail in not being able to give proper primary instruction in reading, language, geography, and numbers.

To correct the former, I have sent to the director of every school district in the county the Course of Study issued by the Department of Public Instruction and asked them to adopt it as their course of study.

To aid the teachers in primary instruction, I called their attention to various books and periodicals published upon this subject, and further, organized a County Teachers' Association and local meetings for their benefit. This was supplemented by the Superintendent of Public Instruction, who gave us a three-weeks' institute beginning August 12, 1889. This was attended by 135 different teachers of our county. By these methods the teachers have received inspiration and desire to do better work.

A majority of the schools were visited by me twice during the school year.

For the ensuing year I shall carry on the work as commenced, having the assistance of better educated teachers and school officers than at the beginning of the past school year.

R. M. WINSTON,
Secretary.

DELTA COUNTY.

In submitting my statistical report for the school year 1888-9, it gives me pleasure to be in a position to record the fact that a marked improvement in the general work of the schools of Delta county has been apparent, and a commensurate gain in results is quite as evident. The country portions of this county, with few exceptions, were settled comparatively recently, and as a consequence, matters relating to education are found to be, in many localities, in a crude condition. Notwithstanding these disadvantages, the spirit of our people in furthering the cause of primary education is truly commendable. As a rule, there is a disposition on the part of local educational officers to adopt such suggestions as may be offered to them, having in view the improvement of the schools and the extension of educational facilities. In some localities, it is true, there is much to be desired and considerable room for improvement, but lack of financial ability, arising from limited population, is usually found to be responsible for a condition of things which the lapse of a year or two will largely ameliorate.

Our teachers, as a class, will compare favorably in acquirement and ability to instruct and govern, with those of any other section of the State.

The Board of School Examiners have aimed to advance the scholarship and usefulness of the teachers of the county, by requiring the attainment of higher standards of excellence, and by urging them to keep abreast of the times in all matters relating to their profession.

On the whole, the close of the year marks the end of an educational period of more than ordinary success in this county.

I am, sir,

Very truly yours,

JOHN POWER,
Secretary.

EMMET COUNTY.

In compliance with the law, I hereby make the following report:

A year ago there was not a quorum of the chairmen present on the day for the annual meeting, consequently I did not make a formal report. As a preface to my report for this year I will therefore say that during my first year as secretary I found our district schools very deficient in many respects, and tried to improve their condition and efficiency. They were particularly lacking in reading, consequently I devoted my efforts very largely to the improvement in methods of teaching reading. I also offered a prize for the most improvement in penmanship. About a hundred pupils competed for the prize, the competition extending through the year, and marked improvement being shown by many. The prize was finally awarded to Annie Bull of Brutus, and Faith Shafer of Petoskey was such a close second that I gave her a second prize. I also offered a prize banner to the school which made the best record on enrollment, regularity of attendance, punctuality, deportment, and scholarship. Quite a number of schools filed notice of competition, but only a few complied with the conditions, and the prize, a splendid satin banner, appropriately inscribed, was finally awarded to District No. 6, Bear Creek.

This year, in accordance with the decisions of the Attorney General and the Superintendent of Public Instruction, Miss Stella Brackett, whose term of office expired last year, remained a member of the Board, her successor not having been elected. Miss Brackett has been absent most of the time, but as the chairman and secretary have agreed upon everything which has come before them, her absence has made no difference to applicants or others, and as the secretary has done, free of charge, the work which the county would have been compelled to pay her for, thus saving something over thirty dollars for taxpayers, there is no reason for anyone to complain.

EXAMINATIONS, BOARD MEETINGS, AND CERTIFICATES.

There have been six examinations this year. At Cross Village, September 28; Petoskey, October 26 and April 26; Levering, November 30; Harbor Springs, March 7 and 8, and August 1 and 2. The board of examiners have been in session 12 days during the year. There have been 114 applicants examined for certificates, of whom 1 has received first grade, 2 second grade, and 73 third grade certificates. Special certificates have also been issued where the scholarship would warrant it, and when the school officers requested it. All of the examination papers for the last two years are on file in my office, together with all the questions for each examination, so that school officers are enabled to obtain exact information as to the qualifications of teachers in each study. The marking alone does not afford

this information, there being great difference in the questions sent out by the State Superintendent for different examinations, an applicant who would fail at one having no difficulty in securing a certificate at another. In a few days I shall send out a complete list of the qualified teachers in the county.

SCHOOLS, ATTENDANCE, ETC.

Last fall's reports showed that in the 63 districts of Emmet county there were 2,419 persons of school age, of whom 1,839 attended school during the year. From the observations I have made, I am led to believe that there will be quite an increase this year.

IMPROVEMENT IN SCHOOLS AND TEACHERS.

I am glad to be able to state that there has been a gratifying improvement in our country schools this year, as compared with last year. A dozen or fifteen districts have purchased dictionaries, others have secured maps, some have bought globes and charts, a number have provided reading charts, good blackboards have been supplied in many school houses where they were sadly needed last year, new desks have replaced "rickety" benches in a dozen places, and nearly every school house in the county is in some respect, at least, better equipped than it was last year. Good school houses have been built at Cross Village and Oden, new outhouses have been built in several places, and old ones attended to in other places, and there are now very few districts which are disgraced by neglect in this particular. Books have been provided in many schools, and there are now very few districts where there is not a reasonable uniformity of text books. This awakened interest on the part of school officers and citizens insures better schools. It is poor policy to hire teachers without providing tools to teach with. School officers should be careful not to pay out money to smooth-tongued agents for expensive apparatus. It is much better to provide the school with the many little things which cost very little, but are of every day use in the school room.

Not less gratifying is the improvement in teachers. The examination papers for the last two years show a considerable improvement in the educational qualifications of teachers, and what is of even more importance is the fact that there is very marked improvement in methods of instruction, and the results obtained. In most of the schools the reading has improved so much that the secretary has thought best to devote his summer visits principally to the correction of the lack of thoroughness, which is now the principal fault of our country schools. The majority of our teachers seem inclined to avail themselves of all the opportunities afforded by institutes, teachers' meetings, educational papers, special study, etc., etc., to become better fitted for their work. Such teachers should be encouraged, and those who teach simply for what money they can get should be left to seek employment in some other capacity.

THE SECRETARY'S VISITS THIS YEAR.

The secretary has complied with the law by visiting at least once this year every school in the county with the exception of one. There the

director reported there would be a summer school, but it was afterwards given up. With the consent of the board, I engaged Chairman M. C. Crandall to visit a number of schools, but I paid him for his services myself, and in every case but one have since visited the same schools a second time myself. In several districts I have visited twice during the year, and intend to make a number of more visits before the close of the year. Up to date there have been seventy-four visits, to make which has necessitated 1,075 miles travel.

THE SECRETARY'S SYSTEM OF REPORTS OF VISITS.

There is little benefit to be derived from a visit to a school unless a careful record is kept of its condition and scholarship, together with whatever the visitor sees to commend or criticise, and his suggestions to school officers, parents and teacher. Last year, in addition to the report required by the State Superintendent, I kept such a memorandum of each visit, and found it of great benefit to me this year in noting the improvement in the school, the progress of classes, whether the teacher had profited by my suggestions, etc., etc. This year I have kept a full and detailed report of each visit, my examination of different classes, the proficiency of each pupil in the different things pertaining to each study, etc., etc. I have also been to the expense of having three copies of each one of these reports written out with type writer, including suggestions to school officers, criticisms of teacher, etc., and have attached to each the report of the visit printed in the educational department of the Independent Democrat. One of each of these copies is on file in my office, one has been sent to the director of each school, and one prepared to file with the chairman of the different townships, giving each chairman full information regarding every school in his township, and the benefit of all the information and suggestions in regard to the same which are contained in the reports. When one considers that it would take a good penman not less than twenty days to write out these reports, it will be seen that I consider them of great value, or I would never have taken the trouble and incurred the expense of preparing them. If this plan is maintained, as it should be, and school officers take proper interest in preserving the records, they will soon become not only of the utmost value to teachers, and an incentive and inspiration to the pupils, but will also be an interesting history of the progress and improvement of Emmet county schools.

RECORDS IN THE SECRETARY'S OFFICE.

The only records of the office when I took possession two years ago were the stubs of certificates recently granted, the register of examinations, and the record book of board meetings, in which no entries had been made for over a year.

The record book of board meetings since that will be found kept up to date, with a record of all meetings as required by law. Likewise the register of examinations. In addition to these records I have the following:

1st. All of the examination papers of all applicants examined during the last two years, numbered and filed for convenient reference.

2d. A full set of questions of each examination, with a tabulated statement of each applicant's standing.

3d. Receipts showing that every cent of institute fees has been paid over to the county treasurer. In his office will be found itemized statements for every quarter during my term of office.

4th. Three hundred and thirty letters filed, numbered and indexed, both by the name of the writers and the number of districts, so that any letter can be instantly found.

5th. Letter book containing copies of about five hundred and fifty letters, properly indexed.

6th. A list of teachers, alphabetically arranged, with entries showing at what times each teacher was examined, in what district she has taught, with time school began and closed, residence, postoffice address, etc. By ascertaining from this book in what districts a teacher has taught, and then referring to the reports of visits to those districts, one can judge with great accuracy as to the teacher's experience, ability, and success as a teacher.

7th. A list of all school officers in the county.

8th. Circulars received from State Superintendent, arranged in order received.

9th. Copies of all bills for salary and expenses of members of the Board.

10th. A set of large envelopes, one for each district, arranged by numbers and townships, in which are kept reports of visits, and everything pertaining to the respective districts.

ACKNOWLEDGMENTS AND RECOMMENDATIONS.

I wish in conclusion to say a word in acknowledgment of the cordial co-operation and valuable assistance I have received from the great majority of the school officers throughout the county, and particularly from Miss Brackett and Mr. Crandall, members of the board.

I have no particular recommendations to make, except to reiterate those I have repeatedly suggested during my term of office. The village schools are in excellent condition, and will take care of themselves. The country schools need more attention from parents and schools officers. They need better equipments. School officers should exercise the utmost care in selecting the best possible teacher. I would advise that they first determine what they can pay, and then get the very best teacher they can get for the money. Parents should try to have their children more regular and punctual in attendance. The teachers should strive to become better qualified for their work. Everyone having any authority in the schools should insist upon the instruction being thorough. Half of the time and money spent for education is thrown away because pupils do not thoroughly complete each term's work. Full and complete records of the scholarship and progress of each pupil should be kept in every school. The class registers I furnished this year at my own expense will answer for this purpose until such time as the schools in the county can be brought to an established grade.

All of which is respectfully submitted.

C. S. HAMPTON.

Secretary.

GOGEBIC COUNTY.

Herewith I hand you the following report:

In regard to the condition of the schools of this county, I wish to say to

you that they are in excellent shape to carry on the educational work of the county and give it a high rank in the State so far as educational advantages are concerned.

Almost all of our teachers are from outside the county, and they have all been selected with great care. One thing I am sorry to report, and that is that we go to Wisconsin almost entirely for our teachers. I think it is a mistake and have done all that I could to turn the tide towards our own normal school and away from Oshkosh, but to no avail as yet, as our principals came from that State and they call in teachers that they are acquainted with.

Yours truly,

J. A. MONROE,
Secretary.

IOSCO COUNTY.

In several cases I find the directors have not handed the Courses of Study to the teachers, and cannot even find them. I sent an explanatory circular letter with each pamphlet, and still in these new counties little attention is paid to the matter. Can you furnish me a dozen more copies? Our hope here is in the instruction of the teachers in the coming institute to be held some time in October next, probably.

I find it very hard to arrange a programme for the schools, inasmuch as the length of school year varies from three months to ten months, but I hope during coming year (if elected) to do some missionary work in the districts and convince them of the educational necessity of at least eight months' school per year. Any suggestions along this line will be thankfully received. During the past year thirty-two copies of "Page's Theory and Art" were studied by our teachers and questions upon the same drafted and used instead of those sent from the Department on Theory and Art.

A present need, which I hope to aid, is a more thorough and intelligent idea of what *mind* is; its three-fold subdivisions, and the order in which the faculties need attention and development. What *cheap, concise* and *interesting* work on that subject can you suggest?

During another vacation (summer vacation) I hope this county, perhaps united with some one or more adjoining ones, may be favored with a three or four-weeks' institute.

On the whole, our teachers are more thoroughly alive to the importance of their calling, and the villages, especially, are beginning to take more practical interest in the schools.

Hoping for much improvement during the coming school year, I remain,

Yours respectfully,

S. B. LAIRD,
Secretary.

IRON COUNTY.

Enclosed find my annual report as secretary of board of school examiners of Iron county.

The small number of districts, not more than two, in each township has prevented the holding of any township teachers' meetings.

No teachers' institute has been held in the county since its organization; some of the teachers attending institutes in other counties and nearly all attending the Menominee Range Teachers' Association's meetings, held annually.

Considerable improvement has been made in attendance and punctuality by publishing monthly in the local papers a tabular report of all the schools in the county.

Schools are generally provided with necessary appliances and are comfortably furnished and warmed.

On the whole, the schools are in good condition and improving.

Very respectfully,

G. L. WOODWORTH,

Secretary.

ISABELLA COUNTY.

In connection with the within report, I might say that I think the schools of our county are rapidly improving under the present system of supervision. A great many of our teachers heretofore had little or no methods of teaching, but simply thought if they passed the examinations that was all we required of them. Since we have been inquiring into the methods they use, a change has taken place, and they (*i. e.*, a great majority) are straining every nerve to improve.

Two great obstacles I find to hinder the progress are poor classification and grading and lack of necessary appendages. However, a number of districts have furnished those appendages since I first visited them. A number of our houses are very poorly ventilated also; but, taking everything into consideration, I think our schools are 25 per cent. better than they were two years ago.

Respectfully yours,

T. KNOX JEFFREYS,

Secretary.

LAKE COUNTY.

I have the honor to submit the following report, as secretary of the Board of School Examiners for Lake county for 1888-89.

In reviewing the work of the board and of the secretary, we are led to consider the actual condition of our schools and of public feeling toward them, the character and qualifications of our teachers and the standard by which we shall judge schools and teachers.

The standard of value in educational work will depend on the standpoint from which we view it. The idea, somewhat vague, of a good or a bad school in "our district," which exists in the mind of the citizen who is busy with the cares of life, will differ from that ideal which those who have given especial thought and years of active toil to training children desire to realize. Judgments vary as to what, and how much, and how we shall do in the schools. The sentiment of the great mass of the community is favorable to schools, but conservative in regard to their management, and while it exacts of teachers good morals, respectable manners and a fair education, it gains slowly in appreciation of any methods which seem new or unusual. It clings to a, b, c, to double l's and toeing the mark, and looks askance at township districts or free text books.

Perhaps there is an inclination to go to extremes in criticising our district schools. In the study, or in some favored locality, we plan a nicely organized, well equipped, carefully managed school, and then we visit the one which the average neighborhood has provided, finding affairs so much at variance that it seems as if the exertion put forth there was wasted. So with teachers: we have our ideal of the thorough training which should precede entrance to the profession, and on the other hand it sometimes almost appears that "anybody can teach school." Now, the neighborhood has likely enough done as well as it knew how to do, and the teacher is conscientious in the routine; there is a real design to improve and a feeling of genuine interest in the work which proves its vitality, and the worst we can say about the situation is, that a *better* organization would make the existing equipment productive of greater results. The thoughtful must plant the seed of true ideas and nourish the springing plants of cautious experiment, which will have a healthy growth when they take root in the hearts of the people.

We can trust this underlying sentiment to correct any error into which it may fall. When the low-tide mark was reached under the system of township superintendents, public feeling commended and sustained the county board of examiners in their efforts to raise the value of teachers' work. We trust it for future aid in increasing the efficiency of our various means of education.

This is very pretty preaching: we will apply it to ourselves.

The Board of Examiners has met two classes of critics; one which complained of our strictness in granting certificates—the other which said we were not strict enough. As the first was usually composed of applicants to whom certificates had been denied, or their friends, we were not much affected by their remarks. To our friends of the other part we have given earnest heed, for unless we should by proper management keep the incompetent from the ranks and stir up the zeal of those worthy to conduct the schools, our official existence would be worse than useless.

We have found ourselves controlled to a certain extent by some local conditions, as will be noted shortly, which have apparently made our work uneven in its nature and results. It has been our endeavor to be just to the community, to give them as good teachers as they demanded, and to shut out the immature and careless. We do not have the throngs of applicants which older counties deal with, nor so many fresh from their books and studies. The difference in population accounts for this, and the fact that we have a good proportion of teachers in the county who have been steadily at the work makes it possible to rank them by their actual ability rather than by a precise per cent.

Two of the board, Messrs. D. A. Cornell and F. J. West, have been associated in this work for seven years, and have become personally acquainted with the diverse demands and resources of different parts of the county, until they have been able to judge with reasonableness on the question of granting certificates, and have known when not to stand on a technical basis of marking examination papers.

We are past the day when "little, teenty, taunty*" would even be offered to show how far the applicant's knowledge of adjectival comparison went; we have on the contrary a good number of earnest teachers who are working

*Fact, a contribution to "English as she is wrote," etc.

up, studying, attending higher schools, succeeding in their work, doing good in the community. While careless and indifferent ones sometimes vex us, we are encouraged by seeing the native tact and ability of others, who are ready to gain and use every device for increasing the interest and worth of school-room work, anxious to learn the best methods, eager to widen and deepen their influence as instructors.

With the means at the secretary's command, he has not been able to visit the schools as frequently as he could wish. He has planned to see the actual working of every school visited, and to this end gave no previous announcement of his coming, thus avoiding any set display for his especial benefit.

Schools have a resemblance—the outward forms soon grow familiar, and it must be confessed that it has only been by studying the characteristics of teachers, their personal methods, and the aptness of pupils that the hours spent in school rooms have been made profitable. Sometimes he has questioned with himself whether the day devoted to district A or B was productive of desired results—it seemed so hard to suppose that one or two visits to a school could leave any lasting impression or change in any way the course of events. But then he has seen the pleasure which teachers and pupils have felt in an *official* visit, a call from one whose business was with *them*, and in almost every case, if not in all, has had some especial question asked, which awaited his coming for answer or suggestion, and has finally felt that the visit was not in vain. Personally, in making and renewing acquaintance with district officers and others interested, and in discussing the various aspects of education with them, the secretary has been repaid for any toil of travel.

Graded schools are organized at Baldwin, Chase, Deer Lake and Luther. We would notice in these, as compared with schools of similar grade in older counties, the absence of the high school grade, and of pupils over 16 years of age. Indeed the secretary has been surprised at not finding any school where there was a large proportion of the active, impetuous youth who make the district school sometimes peculiarly interesting. This may be an "off year," or more likely, to tell a solid truth, the bigger boys are at work in the woods or the pineries, and their sisters are staying at home.

The Luther schools are under the charge of Mr. Evan Essery, whose training at the Michigan State Normal School ensures the use of the best methods in the various departments. The school is well supported by the people of the town, who show their sense of its value by furnishing good buildings and suitable appliances.

At Chase, Mr. James H. Kaye, trained in the Board and Grammar schools of England, and experienced in American teaching, has successfully managed the village school for two years. The work done by him and under his supervision has been excellent.

The Deer Lake school is crowded. Two teachers are employed, and a third one well might be, but as the population is all dependent on the saw-mill now in operation, which will before long exhaust its supply of timber, it is doubtful whether better accommodations will be furnished.

Baldwin employs two teachers, Mr. A. L. Marvin being principal, and the district is faithfully supporting a good school.

The districts generally are supplied with accessories, thanks to the persistence of the genial agents. The secretary noted globes, yea, tellurians,

in many districts. Yaggy's manikin in [35];—he wishes that good wall maps and blackboards could have been as widely distributed.

When we come to speak of the district schools which are outside of the villages, we are met by a perplexing state of affairs, which results from two chief causes. First, we are in a state of subsided boom, owing to the practical exhaustion of the pine timber. This affects the business of all the region, embracing several counties, which once possessed that natural resource, and the schools get their incidental share of the depressing influence. Next, a difference in soil and other natural features divides Lake county very sharply into two practically distinct territories. The eastern tier of townships lies in a belt of hardwood timber, with a soil of sufficient fertility to attract and retain settlers. In these townships, although the pioneer claims no longer residence than twenty years, and where much land is yet unoccupied, we have several schools, say a dozen, of very fair grade, with an attendance of 30, 40 or 50, comfortably housed, maintaining eight or nine months' school during the year, comparing favorably with district schools anywhere in the State, and promising well for the future. These very naturally attract and secure teachers of ability.

The remaining three-fourths of the county, present conditions which have parallels in other counties in the northern half of the lower peninsula, where a certain stage in the development of the country has arrived. The area of standing pine timber is rapidly diminishing, the ensuing desert of stump land is not being utilized for anything except a low assessment and an influence on climate, and the capability of the soil on the "plains" for supporting an agricultural population is to be solved in the future. Two entire townships, Middle and North Elk, have never been inhabited. The homesteads left in the other townships, after the Flint & Pere Marquette Railway land grant had claimed its half, were taken by men who used their best endeavors to make permanent homes, although the shifting succession of inhabitants never found the farms all occupied at once. If Mr. B. came on the N. W. $\frac{1}{4}$ of section 8, township 90 N., range 100 W., Mr. B. had recently removed from some other sub-division. So these settlers of ten and fifteen years ago found themselves scattered over a large territory, and surrounded by great areas of land owned by non-residents. This necessitated large school districts, the residents on the legal limit of nine sections often being none too many to provide pupils in available numbers, for whom a central site would make an average daily journey of two miles;—that is, the nearest would be half a mile from the school house.

By the operation of a well-known custom, there was no difficulty in providing funds for the erection and furnishing of school houses, since the greater part of taxes came from non-residents. It was but reasonable to suppose that the new country would increase in population—at all events the inducements of good means of education should not be lacking. This ability to raise funds might easily have led to various forms of misusing the money, but, so far as our knowledge goes, there were but few instances of it in earlier days, and none lately.

Howbeit, a more grievous calamity befell the land; instead of a continual growth in numbers, the population, meagre at best, decreased, and the exodus, begun about ten years ago, has continued, leaving each year more empty houses, "abandoned homesteads," to bewilder the traveler over these interminable miles.

This process, in connection with a transient floating population, introduced by the lumber industry, has produced some curious results. While the condition is probably a transient one, which will, we hope, not last longer than a generation, it is anomalous, and were it not that it exists all through our northern counties, and is not met by any statute, and was not contemplated by those who framed our laws, it would not be worth mentioning.

These two influences, a small resident population and the changing character of the lumber business, have left us two peculiar classes of districts.

One we may designate as close corporations. The very few families who have remained on their farms in spite of all discouragements, have maintained the district organization, even if the officials had to be placed among the members of one family. The legal forms are usually observed carefully, even jealously. Hence come these schools of 3, 4, 6 or 10 pupils, duly reported each year.

The great principle that the State owes an education to all its members justifies the existence of these schools, nor can we deny the right of any man to live in such a home as he may choose, be it remote or not; but how can we rank such schools?

The establishment of lumber "camps" (headquarters for felling timber) and of saw-mills has created another class of districts. In these cases the workmen and their families have staid for a term of years ranging from 3 to 8, and one of the decencies of life has been a school. Sometimes this has been a necessary concession by the owners of the timber being cut; generally it has been freely provided. When the available supply of timber was exhausted, the population dependent upon it removed to other places for work, and left the district stranded. In some cases barely enough remained to keep up one of the small schools. In others every family went away, leaving the stumps to keep the empty buildings company, and the district to be a missing number on reports. This occurred in a few cases with homestead districts.

There is no legal provision for disposing of the estate of these districts, the township boards of school inspectors can do nothing with them, and they seem to be awaiting, in a comatose state, the advent of a new population to revive them.

To be specific: In the class of small schools we would put districts number 1 of Elk, 1 and 3 of Lake, 1, 2 and 3 of Eden, 1 and 2 of Center, 2 of Webber, 1 of Pleasant Plains, 3 of Glencoe, 1 of Cherry Valley, 1, 2, 3 and 4 of Yates.

Of these, No. 3 of Eden was formed recently. The pupils number five. If these came from as many families we would see in the organization the beginning of a settlement. The fact that the census list shows them to be all members of one family does not change the legal status. Here, as in several other small schools, the secretary found an exact observance of traditional routine in schoolroom work, *e. g.*, it was needful to ring the large bell at the close of the allotted recess time, although nobody was a rod away. In district No. 2 of Eden, there being two pupils, a teacher was engaged to teach for five months, provided any pupils remained in the district. Her family presently found it convenient to remove within the boundaries, bringing three more children, so that when the first family went away before the

term expired, the conditions of the contract enabled the school to continue. We must beg to say this was an unusual and extreme case. Districts No. 1 of Cherry Valley and No. 4 of Yates are well supplied with houses and apparatus, the former especially being furnished with everything from fence to slate wall-tablets, no school in the county more completely, and to enjoy these there are 13 on the census list, of whom the secretary found 3 in attendance, with 3 more enrolled. In contrast with this, the adjoining district, holding school at the village of Nirvana, had 35 pupils crowded in a shabby room, provided with a shiny blackboard and a disrupted 50 cent globe. District No. 4 of Yates—well, when the teacher gave her school a little excursion she added only a single fare to her own.

Districts which have become vacant are Nos. 2 and 3 of Elk, 4 of Pleasant Plains, 1 of Glencoe, 3 and 4 of Cherry Valley. No. 2 of Elk was organized by homesteaders, acquired a large fund of 2 mill tax by division of township in 1875 or '76, spent part of it in building a school house, part of it in teachers' wages to parties in the ring, suffered a defalcation in 1877; finally, every inhabitant left. The furnished house stands. There are some outstanding bills against the district, which no one can devise means to collect, short of a special legislative enactment. Nos. 3 of Elk and 1 of Glencoe were lumber camp schools. No. 4 of Pleasant Plains was several years ago reduced to one family, who utilized the district resources judiciously, for themselves, at least. The board of school inspectors attached its territory to adjacent districts, and the district had nothing to live for nor on. No. 3 of Cherry Valley has neglected its routine business for several years, there having been no children to attend school.

No. 4 of Cherry Valley once had a scattered homestead population, and was possessed of a neat frame school house, placed in the center of a square mile of jack-pine woods. The population diminished until no pupils were left, and at last only one man, without a family, remained. At length forest fires burned the school house. It was understood that the insurance was paid to this district board, or its representative, and if that was the case, the district has assets to that amount, but as no reports have been made for several years, and as this last resident has removed, it is difficult to arrive at exact facts. Probably if any need of holding a school should arise, the district records and property could be found, and the organization revived.

District No. 4 of Webber presents a case of suspended animation, since, after having school for several years, changes in population left no one to attend, and annual meetings and reports were neglected. The occasion having arisen for employment of a teacher, the machinery has again been set in motion.

District No. 3 of Webber has considered it better to send its few pupils to the convenient school in the next district than to maintain a separate school, but has kept up the form of an organization.

These thinly settled districts thus inherit their equipment from a more prosperous business era, so that now they have to exercise some consideration for themselves in levying taxes. Teachers' wages are low and terms short.

Conditions such as these have influenced the board of examiners, restraining their wish to insist on a standard which would be attainable were all the county progressing. We have really had to deal with two classes of teachers,

who have not competed with each other, and while we have been desirous of offering all the districts satisfactory teachers, we have been hindered by the actual state of affairs. The younger and more inexperienced youth who have inevitably been engaged in the smaller schools, have shown a commendable interest in the work, displaying more care for the pupils than those of wider experience perchance might have done.

For, be it remembered, these districts are content with their schools, and it is only our more general view which notes their contrasts. It is only the necessary result of their mode of existence which distinguishes them, and which will prevent any great advance until circumstances undergo a radical change.

So much for one phase of the public life in that square of the State checker board known as Lake county. We take our part, be it great or small, in the development of the commonwealth, following the same laws of growth which govern others, exerting our share of influence on the community at large. When the future shall have brought stability to our population and permanence to our resources, however wrought out, the trials and discouragements of the past will be forgotten in the abiding strength of those influences which kept the school house open for every child and the light of knowledge burning in every corner of the land.

Respectfully,

F. J. WEST,
Secretary.

LAPEER COUNTY.

There has been a general toning up in school matters of this county during the two years of county supervision. School officers are more careful in the selection of teachers, and employ them for a longer time. A large number of districts have trustees who are alive to the needs of the school. Where during the first year I found almost no school, there is now one that shows good organization and equipment. We are more careful than heretofore whom we license as teachers. Ability to manage and instruct are carefully considered in the re-granting of certificates. The teachers also feel a greater responsibility for the general improvement of the rural schools.

We hope, during, the coming year, to see every school fairly classified and a course of study in use in nearly all. The old hap-hazard, no system plan will soon be supplanted by systematic and progressive work.

Respectfully,

C. E. PALMERLEE,
Secretary.

MACKINAC COUNTY.

In compliance with your request, I herewith transmit a manuscript report for the school year 1888-9 of Mackinac county, which in some respects I intend to be a mere private letter.

The territory of Mackinac county is very large, and the most of it wild and unproductive. It is 84 miles long and in very irregular shape. The school districts are long distances apart, and only a few of them lie in contiguous territory, the most of them having wild and waste land between. The winters in this section are very long, and the snow-fall very deep.

As a general thing the number of children in the districts is small, and to avoid the deep snow, the school terms are held either in the latter part of spring and summer or after September. As compared one with another, these terms are very irregular. On this account I found it difficult to go into certain towns to visit the schools and find them in session at the same time, and I failed in visiting some of them, but I passed through the neighborhoods and by inquiries I am sure I understand their conditions.

The settlers, as a rule, are pioneers and poor, nearly all having commenced in this county within the last nine years. I found them very sensitive to criticism, and were inclined to receive the mildest suggestion as rather offensive.

It is now a little over a year since the M., S. P. & S. Ste. M. R. R. has been completed, which extends almost lengthways through the best part of this county, which had been in that locality a wilderness just before. This road is developing the country rapidly, and along its line in this county several stations are located, which will be, within the next two years, formed into vigorous school districts. With but three exceptions the only suitable school houses are along the line of the D., S. S. & A. R. R. In this county the secretary becomes more useful when he obtains a thorough knowledge of the conditions of the districts, by giving advice and selecting districts for the teachers. When it becomes the custom for district officers to consult the secretary in employing teachers, the influence of his position and office can be made very salutary. It will require but little effort to produce such a custom. It will take a secretary fully a year to understand thoroughly the conditions of the districts, and then to give the office its best efficiency he ought to hold the position for at least four years. Now the custom of this county is the reverse of this. * * * *

Respectfully yours,

JAMES McNAMARA,

Secretary.

MANISTEE COUNTY.

The work of this past year has been similar to that of the preceding years, viz: Frequent visiting of schools, suggestions, criticising of methods, examples of teaching. Private individual work has been done by stimulating the teachers to better fit themselves for teaching. This effort has been very successful, as many teachers have gone to summer schools for teachers. There has been a general improvement in qualifications.

In addition to the work of last year has been meetings of district teachers every month, for the purpose of general discussion of school work, and at this time I have set apart a portion of the time for institute work.

There is harmony among the teachers, and between them and myself.

The board has simply confined itself to examining papers.

Respectfully

JEAN McDIARMID,

Secretary.

MUSKEGON COUNTY.

I have the honor to submit the following brief report of the work of the secretary, and the county board of school examiners of Muskegon county.

There have been held, in this county, during the year, two regular examinations and five specials. Seven meetings of the county board to issue certificates as required by law, and four other meetings of said board to transact such business and perform such work as, to them, seem necessary for the good of the schools of this county.

At a meeting of the county board, held October 20, 1888, the following rules and regulations for use at all public examinations were adopted, and have since been in full force and effect:

RULES AND REGULATIONS.

1. Throughout the examination you will be known only by your number.
2. Do not write your *name* upon any of your manuscripts. Write on *one* side of paper and do not *fold*.
3. Write your *number* at the upper right-hand corner of each written page of your manuscript, and the subject of the list of questions on the same line left of your number.
4. Number each answer to correspond with the number of the question answered, using for this purpose the margin on the left of each page.
5. Always leave a blank line or space between your answer to every complete question or group of questions regarded as one. Number answer to questions grouped together, thus, (a), (b).
6. Applicants will not be permitted, at any time during the examination, to receive any aid or information, directly or indirectly, from other applicants, or from any other person whatever, touching the meaning or the intended construction of any question or problem; but if such applicants have any doubts as to the meaning of any question on the list, they should state in *writing* their construction of such question *before proceeding to answer it*.
7. All applicants will be expected to complete each subject at the time indicated on the examination program, and should not ask to leave the room until the time so fixed for each subject has expired.
8. No persons other than the board of examiners, will be permitted to bring into the room any books, maps or other aids, while the examination is in progress, and such books and aids as may be found in the rooms at such time shall be removed from sight before the questions are distributed.
9. Visitors and applicants will be expected to avoid unnecessary communication in the room, during all the time allotted to each list of questions.
10. The solution of all mathematical problems must be fully and correctly *indicated*, and such demonstrations and full solutions given as the board of examiners may direct.
11. The applicant's penmanship shown in manuscript of Orthography and Reading will be graded with reference to *legibility*, (50), *regularity of form*, (30), *neatness*, (20).

NOTE.—The handwriting of each applicant will be considered IN ITSELF rather than with reference to "standard forms."

12. Applicant's average in orthography as shown in MSS. of examination will be obtained as follows:—No. credits allowed for correct answers to State Questions, 80.—No. credits allowed for correct spelling and proper use of capitals, 20. *One*, (1) will be deducted from the latter for each word *incorrectly written* as shown in MSS. on orthography and

13. Applicants average in grammar, as shown in MSS. of examination will be estimated upon number of correct answers to State Questions as follows:—(a) Maximum credits allowed for Analysis and Parsing, (25). (b), Maximum credits allowed for knowledge of Principles and Rules, (30). (c), Maximum credits allowed for Language Work, Composition and Syntax, (45).

NOTE.—For credits in last item applicant's papers on..... will be taken as a test.

14. Applicants can make such use of slates and pencils, while preparing answers, as may be deemed necessary; but the work on the papers on..... which are passed in must all be written in *ink*.

15. Each list of questions must be attached to, and returned with the proper MS., and at the close of the examination this copy of the rules and regulations, together with all unused material furnished by the board must be returned in like manner.

By order of the board.

H. A. LEWIS,
Secretary.

At the commencement of each examination, and before the package containing the questions is opened, each applicant must fill out an enrollment card stating name, age, postoffice address, months' experience in teaching, etc., etc. Which enrollment cards are then collected and placed in a box provided for that purpose. The box is then locked, one member of the board taking charge of the box and another of the key, the box remains locked until the manuscripts of applicants have been examined and a schedule of the examination has been made.

At the meeting of the board to issue certificates, the box is opened, and the name of each applicant written on the schedule opposite the number corresponding to the number on enrollment card. At this time success in teaching, attendance at institutes, and county association meetings, etc., may be considered and due credits given for the same. Certificates are then issued to successful candidates, and standing sent to unsuccessful ones.

The above method secures fairness to all, and has met, generally, with hearty approval of the teachers.

During the year, the secretary, supported by the county board, has made an effort to secure the adoption, by district boards, of the course of study prepared and issued by the State Department, but few rural schools have, as yet, adopted it. But encouragement has been received from the teachers generally, and from many school officers and patrons, who have expressed themselves favorable to better school organization, and the grading of district schools.

At the joint meeting of the county board of school examiners and the chairmen of the township boards of school inspectors, held August 6, 1889, the necessity for and the practicability of a uniform course of study for the county was discussed at some length, and a committee appointed to arrange "a Course of Study for the Country Schools of Muskegon County."

The committee thus appointed have accordingly arranged such a course, which follows very closely the plan of the one issued by the State Department. And it is hoped and believed that during the next year its adoption will be secured in many of the schools.

There has been during the year a change of text-books in a number of schools not previously having a uniformity, and in most instances the books adopted are of the same kind. So we are approximating a uniformity in the county, which will assist in securing better organization and a uniform course of study in the schools.

The secretary has made one hundred twenty-six visits to the schools. The several schools not visited, as shown in the statistical report, were missed because of having only a short term which expired early in the year, or of their not being in session at any time when other schools in the vicinity were visited.

The general improvement of the schools throughout the county is very encouraging, and, as a class, they are in a very prosperous condition. School

officers and patrons, generally, manifest commendable interest in the schools.

Teachers are improving themselves, are becoming more in earnest, more energetic, more industrious, practical teachers, reflecting credit upon the profession and instilling into the schools that intellectual and moral stimulus so potent in inciting the pupils to renewed and increased effort. Many are making teaching a permanent occupation and are becoming broader in culture and scholarship. They are keeping pace with the times in general school management and methods of imparting instruction.

To our teachers belongs a large part of the credit for the prosperous condition of the schools of this county.

We have not had, until the year just past, a regularly organized Teachers' Association in this county.

In October such an association was organized at Whitehall, with Supt. C. M. McLean as president.

The first meeting after that was held at Lakeside, and, though a severe rainstorm prevailed all day, there was a good attendance, and much interest manifested. The next one, which was a decided success, was held at Ravenna, about seventy teachers, besides patrons of schools and other friends of education, being present. All seemed to feel that the day had been pleasant socially as well as profitable intellectually.

The meeting last held was at North Muskegon. Prof. Pattengill, of the State Agricultural College, delivered an interesting lecture to a large audience in the evening preceding it. The attendance was large, and the papers presented called out lively and interesting discussions.

Our next meeting will be held at Whitehall, on the first Saturday in October.

The kind hospitality of the citizens at all the places where the Association has held its meetings, has contributed in no small degree to make them pleasant and profitable.

We hope to increase our membership largely during the next year.

A State institute was held at Montague during the first week in April. The attendance was large and the best of interest was sustained throughout. We were honored by a visit from our State Superintendent, who made his influence for good felt upon all.

One of the existing evils is the constant change of teachers in certain schools.

Some people appear to think they need a better teacher during the winter months, and in some cases vote at the annual meeting to hire a male teacher for that term, believing the strong hand of a man is necessary to the discipline of the school. But when the winter term closes the teacher must go, and some one who is willing to teach for small wages is hired for the spring term.

In the absence of a course of study, this brings a change of plan in the school work, and necessitates a loss of time which might be avoided if the same teacher was retained during the year, at least.

The secretary has called the attention of school officers to this evil wherever it was found to exist.

It is gratifying to state that in a large majority of the good schools in the county the teachers are hired by the year.

In regard to legislation, I have no comments to make, except to express regret that the Township Unit bill did not become a law.

Very respectfully,

H. A. LEWIS,
Secretary.

OAKLAND COUNTY.

In compliance with the statute, I have the honor to submit herewith my manuscript report of the work and the condition of the schools of our county during the school year ending September 2, 1889.

I entered upon my duties the first of the year with a determination to devote my whole time and talent to the work in trying to elevate the standard of our schools and, if possible, raise them to a higher plane of success.

1. In regard to the work, method and plan of examination of teachers.

We have held examinations upon all the dates suggested by you during the year. We have had presented to us 527 applicants for certificates. From this number we have selected and granted 330 grade certificates, and where we have been satisfied that young teachers could teach a small summer school, and not feeling justified in qualifying them for a winter term, and wishing to know their ability to govern and discipline a school, we have granted them a special certificate. We have often felt the necessity of a six months' certificate. In addition to this, specials have been granted to meet certain emergencies.

We have required two days' work for higher grade, with an average of 95 per cent. for first grade and 90 per cent. for second. For third grade we require one and one-half days, with an average of 85 per cent. in both oral and written work. We divide the class into sections and have oral work in connection with the written. We do not endorse any certificate from other counties. The secretary does not issue any special certificate without permission from the board. All strangers to the board whose ability to govern and discipline a school successfully is unknown to us must furnish satisfactory testimonials in regard to character and success in teaching from employers.

We require that applicants who have failed shall do all the work if they try again. No certificate is granted to a teacher who has begun teaching before being examined without permission from the board. Applicants cannot do part of the work and then finish at some subsequent examination. We always have a meeting of the board on the following Saturday after the examination to carefully review the work and adjust the standing of each applicant. We have been gradually raising the standard and qualifications of teachers, and we find as a general thing that our teachers are well qualified in regard to education and methods of teaching.

2. As to the supervision and visitation of schools.

At the beginning of the school year we determined, if possible, to visit every school in the county during the winter term and to visit them by townships and as near the beginning of the term as possible. I soon saw that the work laid out could not be accomplished without help, as we have a large county, embracing 220 school districts, 14 of which are graded schools. I therefore thought best to appoint as my assistants Elmer R.

Webster and Fred Weiland, the school examiners. Both have had large experience in school work and are well informed as to the needs and wants of the schools in the county. Each was to do one-third of the work of visitation and to be paid from the secretary's salary, so there was no extra expense to the county. The graded schools were to be visited by all members of the board at the same time. In order to assist us in our work, we requested each teacher to notify the secretary when they began teaching, giving the number of district and township, and when the term would close. In order to carry out the plan, we gave each teacher at the examination a postal card blank to be filled out and mailed to the secretary immediately after commencing school. This plan aided us in our work so that nearly all the schools in the county were visited during the winter term. In the summer term we visited all the new beginners first, and then as many of those whom we visited in the winter as we could. We have made 330 visits during the year, of one-half day each. We visit the school officers as well as the school, and have issued circulars requesting them not to hire a teacher until they have a certificate in force, and to employ by the year instead of from term to term, and we are glad to note that the number of schools that are adopting this plan is rapidly increasing every year, and we can see good results obtained from the plan.

We have tried to get a greater uniformity of text books, so that we could grade the schools, and have awakened an interest among the school officers, so that the text books are becoming more uniform in most of the schools of the county.

In many schools we have succeeded in improving the sanitary condition of the school houses and surroundings, and are better supplied with apparatus and supplies than they were a year ago.

Teachers are becoming aware of the fact that in granting certificates the success of the applicant in imparting instruction and disciplining a school is taken into consideration, and they are convinced that success in the school room means success at the examination. We are glad to report that the teachers of our county are doing very good work in regard to discipline and methods of instruction. In our visitations we have been kindly received both by teachers and patrons, and any suggestions we offered which seemed for the best interests of the schools have been gladly received, and we believe that the rural school teacher is doing both effective and successful work, and laying a foundation upon which it will be safe to build.

We still find many defects in the schools of our county which are common to all the schools of the State, but we are working with untiring energy and zeal to overcome and remedy them.

We have too many small districts without friends and patrons to sustain them, and they have school just long enough to entitle them to public money. Another grave defect is the lack of school records. We have been advocating the plan that each pupil be examined at the close of the term and their standing left on the school records for the benefit of the teachers' successor, and that a card be given each pupil with the standing of each branch upon it and to be presented on entering another school, so that there will not be so much time lost in finding out where they belong. I think a great deal of time is lost in thrashing old straw.

At the joint meeting of the board of county school examiners and the chairmen of the township boards of school inspectors the following topics

were profitably discussed: .1st. The present standard of qualifications for teachers. 2d. Benefits of school visitation. 3d. Duties of school boards. 4th. Common defects in district schools.

Many valuable suggestions were made and the meeting was full of interest and enthusiasm for the welfare and success of our schools. It was concluded that the present system of school visitation and supervision is having a decisive influence in improving and elevating the standard of our public schools.

The law in regard to teachers attending institutes while their schools are in session was discussed and the following resolution was adopted by the township chairmen:

Resolved, That it is the sense of this meeting that we endorse the law in regard to the attendance of teachers at the county institute whose schools are in session at the time, and that we advise teachers to avail themselves of this opportunity and attend the institute.

We have been favored with a two weeks' State teachers' county institute, which was ably conducted and largely attended by the teachers of the county, and we are glad to note that they appreciate such advantages afforded them, and that they go forth to their work with renewed energy and zeal after attending it. It is a fact that our best teachers avail themselves of this opportunity.

The outlook for the coming year is very auspicious, as many of our teachers have been re-engaged, and we shall go forward with our work to make the system a success and with a determination to elevate our schools to a higher standard.

CHARLES W. SOULBY,
Secretary.

OGEMAW COUNTY.

Enclosed please find my annual report of schools visited for the year ending September 1, 1889.

The total number of districts in the county is 45, but three of these had no school during the year. One school, which only had a three months' term, I failed to get to. I visited the district once, but found no school. Our schools are all small, but the work done is, we believe, up to the average. We found it necessary to refuse a renewal of certificate to one teacher who was found to be a failure in the schoolroom. The board of examiners and the secretary have worked with the greatest possible harmony and, so far as we know, with the approval of the people of the county. There was no opposition either to the reelection of the old examiner or the reappointment of the secretary.

We now have practical uniformity of text-books throughout the county. The new law providing free text-books is bound to come into favor and to be adopted in a majority of our schools next year.

Very truly yours,

A. E. SHARPE,
Secretary.

OSCEOLA COUNTY.

In making a report to you of my work for the past year I shall omit that part of the details which will appear in the statistical reports, by which this will be accompanied.

The work of visitations has been carried on for the most part by townships; but that order was necessarily varied in some cases, because this county is not perfectly supplied with roads, and it became necessary, sometimes, to take the schools in groups; a group being located frequently in two or more townships.

In all my school work the ultimate object which I have had constantly before me is the improvement of the schools under my charge, to increase the teaching power of the teacher if possible, and add to the facilities of the scholar for acquiring knowledge. Of course there comes in incidentally another duty which I aim to discharge just as faithfully, *i. e.*, to find out those teachers who are failures in the schoolroom, who are behind the times, and do not try to keep abreast with them, and induce them by some means to leave the ranks.

I do not seek for faults in a teacher but for perfections; on entering a schoolroom I try to take the most favorable view of everything I find, but at the same time I try to see things just as they are, and if I find an error in order or methods of instruction, never fail to call attention to it at the proper time. I have tried "hitting off" the mistakes of individual teachers to a class of teachers at a township meeting, and, while it will do in some cases, I find that those who most need such hints are most apt to think they are meant for some one else—therefore I believe that kindly, but unflinchingly pointing them out in a personal interview is the better way. I have found but one or two instances where any offense was taken from so doing in all my experience of the last two years.

There is much that lies in the way of the secretary's work. One of the tangible obstacles is the lack of judgment in hiring teachers. Any one whom the examining board may license will certainly find some district board to hire him.

Again, few in the district deem it a duty to visit the school to see how things are going on there, but depend on what the pupils say to form their judgment, it is needless to add that children are very apt to like or dislike a teacher, according as he makes it pleasant or not for them while under his charge. I know that a teacher may make his school both pleasant and profitable, yet there are good teachers in the field who, lacking that happy faculty, yet having a conscientious desire to do their duty, are struggling along trying hard to make their work a success, while the report goes from discontented delinquents that he is a failure, and unfortunately they are too often believed, and the hard-working teacher, wanting in nothing but tact, perhaps, is dropped for one who may possess more of that qualification, but be wanting in almost everything else requisite.

It sometimes happens on going into a district that I hear the most flattering accounts of the school, but on visiting find it is little better than a play school.

There is no standard of scholarship held up for the pupils to try to reach; no thoroughness required in preparing and reciting lessons; no system of order insisted upon, nor, in fact, is there anything done but to follow a

routine of school exercises, which is almost barren of good results because there is no life nor interest in the work. The teacher is working for hire and salary. The secret of the favorable reports concerning the school is this: The teacher by his companionable manner and affectionate disposition has won the children's hearts; they have a good time at school—are not troubled by any too strict discipline nor compelled to get long perfect lessons at the risk of losing some cherished privilege, or of suffering some other form of punishment—hence the good words for the teacher and also the desire to be present every day. Now, finding such a state of things, it would be the height of folly for a secretary to say to that teacher or to the district, “that he is a failure;” “that all this must be changed.” He must try to gain the confidence of the teacher, and induce him to make such changes as are necessary. In such cases the only way in which to benefit the school is through the influence to be gained over the teacher, induce him to read journals, and take suggestions and ingraft them into his school work. The assumption of authority would involve the utter defeat of the object desired.

The power to hire teachers is entirely beyond the control of the examining board; the only way they could influence it would be by the exercise of whatever influence they might attain over the district board. Therefore, the wisest plan to adopt is to conciliate teacher and district and lead them up to see what constitutes a good school, and then to aid in bringing them up to that standard.

Of course in ultra cases of inefficiency or neglect on the part of a teacher, if a chance to improve is not accepted, the duty of the board is imperative, and should be, and in this county always has been, discharged without flinching. And here it may be well to say, that in such cases I have always had the most intelligent advice and steadfast support from my fellow-workers upon the Examining Board.

The number of schools visited counting each department of a graded school as one (and it amounts to that in making visitations), is 103, about one-fourth of which have been visited the second time, and in some instances the third and fourth times.

Special attention has been given to classification and grading of these schools, and as a result about 75 per cent. or 80 per cent. of them are now about as well graded as a school with one teacher can well be. There yet remains something to be done in the way of tabulating and arranging the work so that when a change of teacher is made the incoming teacher can take up the class work where the predecessor left it without loss of time to the class. A movement of this kind is on foot, but it takes time to accomplish it. One of the chief hindrances lies in the fact that but few district boards take as much interest as they ought in such matters.

The law provides that the district board shall adopt text-books for the use of the school and recommend the patrons to furnish their children accordingly, but only a very few have done so in full compliance with the law.

It is also urged that they adopt a course of study to be pursued in the school, and this I may safely say has been done in not more than 10 per cent. of the schools of the county.

Circulars have been sent me from the Department at Lansing for distribution amongst the directors of all the districts, containing a copy of the late law authorizing school districts to decide by vote at the coming annual

meeting whether or not they shall have free text-books, and these have been faithfully distributed, with what result remains to be known.

To sum up briefly, it will be seen by any one conversant with the schools of this county that the standard of excellence has been raised from 25 per cent. to 40 per cent. during the past two years.

Teachers are aware that there is one in the field looking after their work, who will not wink at a single fault that he can in any way detect, and it exerts a salutary influence on them. They never know when to expect him, and so most of them try to be always ready. If continued in the office another year I know I can accomplish a great work in this county.

Respectfully yours,

R. C. HEPBURN,
Secretary.

OSCODA COUNTY.

As per request, I hereby send you a report of the work of the board of school examiners for Oscoda county for the year 1888-89.

The majority of the teachers of this county are inexperienced and have never taken any interest in educational advancement. The most they had thought about was to pass the examinations (or, more frequently, get a permit), get a school and draw the pay.

What we have tried to do is to get them interested in school work.

In the past there has been one or two failures in the attempt to organize an association, but we have succeeded. Our first meeting had nine teachers in attendance, our second and last had fifteen out of eighteen teachers, besides a number of others not teachers came and gave us a helping hand.

I can safely say that the teachers of this county have never taken the interest in education that they do at the present.

We are in need of some good teachers; there are not teachers enough to fill the schools. There are six or seven schools in the county which had no school on this account, and they will not pay wages so a non-resident can afford to come here to teach.

Our work this year has been to grade the teachers and get them interested in their work, and I think we have met with fair success. There are more teachers taking educational papers than ever before, *i. e.*, in this county.

I think that before a year from now the teachers of this county will be so working in union that there will be an attempt at grading the schools.

Can you tell us something near the cost of an institute? We have about \$40 now and we intend to petition the board of supervisors for an appropriation. A majority of the teachers are anxious for an institute.

Yours respectfully,

DEWAYNE BLAKLEY,
Secretary.

OTTAWA COUNTY.

In making a separate manuscript report to the printed one enclosed, and additional thereto, I would say in respect to

No. 13. That to the thirteen named as having attended the State Normal School may be added a large number of those attending the two terms of the Summer Normal School at Holland, during the seasons of 1888 and

1889, at the former about 50 and at the latter about 75 persons, from various sections of the county, each session of the school continuing six weeks, with finest results.

In respect to the number receiving certificates that had attended institutes during the current year, it might be stated that the State teachers' institute for our county was held the first week in April, after the leading examinations had been held in the spring series. At that institute I think the enrollment reached 160 and upwards of earnest and attentive members.

The two teachers' associations seem to render township associations scarcely necessary, as all teachers that can well do so seem to make it a point to attend their monthly meetings.

The secretary not only visited all the schools in the county once, but *nearly all a second time*, believing repeated visitations, properly conducted, productive of most beneficial results, and particularly so on change of teachers.

Means Used for the Improvement of the Schools During the Year.

1. "Course of Study and Daily Program for Village and Country Schools," issued by the State Department of Public Instruction and put into the hands of teachers generally, has proved of great value in the proper classification, instruction and general management of the schools, especially to our less experienced teachers.

2. The holding of a State teachers' institute in April last, at which a very large attendance was secured with fine results, apparently.

3. The maintenance of two teachers' associations, with a large and interested membership in each.

4. The Summer Normal School at Holland, with an attendance of about 75 persons from our county, under a six weeks' course of instruction that must prove of great value to teachers in attendance in their future school work.

5. School visitations by the secretary with an aim to make each of as much practical value as possible to teacher and pupil.

6. The many valuable suggestions received and adopted in school work found in educational journals and books on pedagogy taken and carefully read by a very large portion of the teachers of the county.

7. The interchange of school visitations by teachers and a comparison of views on plans and practice.

8. A very general classification of the pupils in school work, so as to secure, as far as possible, proper instruction to all.

9. The adoption of a uniformity of text-books in each branch in nearly all the schools, thus greatly facilitating the labors of both teacher and pupil.

Future Needs of the Schools.

1. A vigorous prosecution of the work inaugurated during the past year, with such additional work as the condition of the schools, in severalty, seems to demand, from time to time.

2. A much longer term of service of teachers in many of the schools (doing good service). The secretary finds in several townships of the county a practice, almost universal, of changing teachers from the winter to the

spring term of school, a step often decidedly detrimental to the best interests and rapid progress of such schools.

3. A more complete outfit of school appliances—dictionary, globe, maps, and, in many districts, additional and better blackboard facilities, which the secretary, aided by teachers, will seek to have supplied as soon as possible.

4. A more frequent visitation of the schools by patrons and school officers and consultation with teachers as to plans of school work, the discipline of the school and the progress of pupils in school work.

In Conclusion.

The secretary is fully persuaded that very praiseworthy progress has been made in the efficiency of the schools of the county during the school year about to close, through the vigorous and well-directed efforts of teachers and pupils, and the outlook is most encouraging that the year ensuing will be still more marked in grand results, under the best united efforts of secretary, teachers, pupils and friends of popular education generally.

A. W. TAYLOR,
Secretary.

ROSCOMMON COUNTY.

Enclosed find my annual report.

I have nothing of importance to add in addition to the report. Our county is very sparsely settled, and I shall make every effort this year to persuade the school officers to settle on some good system of text books, and have them uniform if possible.

I find that nine-tenths of the pupils in the country districts belong to the primary classes, outside of this village, which is a graded school. We think that under the circumstances we are doing well. Our percentage for third grade teachers, 65%, is high enough, for the reason before given. Many of the schools only contain from seven to ten pupils.

Yours, etc.,

H. H. WOODRUFF,
Secretary.

SANILAC COUNTY.

During the session of the board of supervisors last October, a committee of five teachers met with a committee of five appointed by the board of supervisors for the purpose of devising some means by which all the schools in the county could be induced to adopt a uniform system of text books.

It was decided by the commission that a series of text books be selected for use in the district schools, and that the various school officers and teachers throughout the county be asked to sink all their individual prejudices in regard to the kind of text book, and press the adoption of the books recommended by the committees. It was also recommended that the change be made gradually—that is, as fast as a class was promoted or whenever new books were required to be purchased. The county secretary was authorized to issue a circular to this effect.

After careful examination and comparison of the leading series of school books now before the public, the committee unanimously selected, as the

best, the following: Sheldon's Modern School Readers (5 books), Olney's Arithmetics (2 books), Patterson's Common School Speller, Stoddard's American Intellectual Arithmetic, Olney's Algebra (2 books), Olney's Geometry, Lossing's Outline History of the U. S., Eclectic Primary History, Harper's Geographies (2 books), Cocker's Civil Government of Michigan, Harper's New Copy Books, Reed & Kellogg's Grammars (2 books), Young's Government Class Book (U. S. Civil Government), Steel's Hygienic Physiology, Kellogg's First Book in Physiology. Maps, Globes, Dictionaries, Blackboards and miscellaneous school supplies from W. A. Olmstead, 182 and 184 Wabash avenue, Chicago, Ill.

In order that we may secure county uniformity as soon as practicable, teachers and officers are earnestly urged, when making changes, to be careful to introduce only the books recommended.

It is hoped that all will use their influence to secure uniformity. Let the people of Sanilac county look to their own interests and not allow themselves to be influenced either by publishing houses or enemies to the movement.

The secretary of the board of school examiners will willingly answer all inquiries in regard to this new movement. Teachers will advise this change as soon as practicable and with as little expense as possible.

School officers are requested to call a meeting of the board and act upon the question of uniformity at once.

H. C. MORRIS,
Secretary.

SHIAWASSEE COUNTY.

The secretary of the county board of school examiners would respectfully submit the following report and recommendations:

Of the 123 schools in Shiawassee county under the jurisdiction of the county board of school examiners, the secretary has visited them each once, some twice and three times, making in all 185 separate visits. It being impossible to visit all the schools during the spring term I adopted the plan of visiting those schools where teachers were beginning for their first term, believing that to be more advantageous, as all the ground had previously been gone over and the exact letter of the law carried out. In this way the county was mostly again re-visited during the spring term. The time ordinarily spent in each school was from two and a half hours to one day, often taking charge of the classes.

The city schools of Owosso and Corunna have also been visited with a desire to compare the methods of the country and city schools and to improve the former where possible and practicable.

On the whole the country schools have been well managed. There are some exceptions, where advice and remonstrance was necessary, and where certificates cannot be again granted.

The weak part of the system of teaching now in use is the primary instruction and teaching penmanship. The attempt to remedy this is now in successful operation at the teachers' institute.

The weak part of the system of district school management is the part patterning after the city schools in division of school year into winter, spring and fall terms without the security of tenure of position to the

teacher in the district schools that is given in the cities and villages, and without the careful scrutiny of applicants' qualifications and recommendations.

In the secretary's office is a system of triplicate reports obtained from as many districts as possible by the co-operation of directors and ladies within their districts. The reports are: First, the secretary's report of schools based on visitation. Second, the directors' report, which is based on visitation or observation, which is supposed to reflect the popular judgment of the district. Third, the ladies' report, based on the visitation of three ladies who either separately or as a committee visit each term. There are ladies in each district whose judgment and past experience as teachers render them especially fitted for such purposes; besides it acts as a mutual stimulant to patrons and teachers to thus visit.

Now to go back to the subject of hiring teachers. Were the directors to require of each teacher a statement based on these three reports compiled by the secretary, and have not more than two individuals as teachers during the year, a great advance would be made. Circumstances may sometimes make it necessary that a more experienced teacher be engaged for the winter term, but by all means let the spring and fall terms be taught by the same teacher if competent. Perhaps fifteen per cent. of the schools hire by the year. I can notice a difference in schools where long tenure has given the teacher a complete knowledge of the school's *personell*.

I addressed letters to several directors where hiring by the year was the custom, and these will be appended to this report.

An attempt to approximately classify the district school pupils has been undertaken. To this end a class register was placed in every school district to keep a record of class recitations or reviews. Enclosed in this book was the Superintendent of Public Instruction's pamphlet on grading district schools. The registers are valuable as a stimulant to pupils, who examine them to see how their recitations are regarded and to compare their own standing with that of their classmates. The instructions from the county board were for each teacher to indicate where classes ceased work at close of term, so that their successor could immediately take up the classes at that point. The secretary can inspect these registers and ascertain the class standings and more accurately judge of the work that has been done.

Arrangements have been made with most of the high school superintendents and principals to admit district school graduates to the high school without further examination. By a district school graduate is meant that at or near the close of next winter's term to hold an examination at some central school house in each township, and all pupils who have completed the district school course and passed a satisfactory examination on the subjects ordinarily taught in district schools, conducted by a member of the county board of examiners or some well known teacher.

It is a bit unfair for the boy or girl in the country, after a good winter's work at school, to pass an entrance examination in the fall for the high school when he has become rusty in those branches during the summer. Many district school pupils underestimate their own acquirements and overestimate the high school requirements. With a desire to complete the district school course and a knowledge that they can enter the village or city high school, many pupils would take a higher education.

The mark of the successful teacher is to inspire to higher education. Such an examination would also recommend to the Agricultural College, but have no official weight. The only school legislation I interested myself in was an attempt to get the State to place a map of Michigan in every school house. The State, owning a plate in Chicago, could have had the maps printed at trifling cost, as will be seen from the letter of the Commissioner of Railroads, which is appended to the report. The joint resolution authorizing the State to furnish these maps was introduced by the Hon. John Holbrook, but never was acted on. I would like the maps, and will ask your advice as to methods of procuring them.

There is a German maxim which says: "What you would have in the State, teach in the schools." To love and admire one's country and the flag of that country is a sentiment that should prevail in the State. Nothing could so educate that sentiment as a National flag in every school room. Most of the present board of inspectors and examiners are a generation removed from those who saw and defended that flag from '61 to '65. Those who at present attend school are still more remote from the significance of that flag at that time. Shall not patriotism be taught from the emblem that furnished the inspiration at Gettysburg and Shiloh? I would place the National flag, with its stripes and forty-two stars, in every school room in the county. I would have every teacher use it as an object lesson and tell his pupils of its glories. The question is, shall this be done and how?

A successful school in a great measure depends upon the adequate preparation of the teacher. Circumstances have permitted us to very materially aid in that preparation by having one of the longest institutes held this year in Michigan, the ends sought being accomplished after four trips to Lansing. It would be very gratifying for this board to visit the institute now in session until August 24.

The coöperation of this board should be given to reviving the ancient and honorable spelling school. If the same intense earnestness that crystalizes around base ball in the summer was devoted to spelling schools, etc., in the winter the net results would probably be in favor of the winter's games. The boy who can master the spelling book should be as much of a hero as he who masters the different curves of the base ball. I mean that the teachers should reëstablish the spelling school and the inspectors and patrons of the school should give them encouragement.

In closing this year's report, I desire to say that the board of school examiners have been harmonious, acting in concord upon all measures. And perhaps it may not be out of place at this time to acknowledge the worth of one member of this board whose successor has just been elected. I refer to Mr. Griffith, the competent and courteous chairman of the board during the past year.

JAS. N. McBRIDE,
Secretary.

WEXFORD COUNTY.

Enclosed find statistical report.

I have visited all the schools in my county at least once, but one—that one the house was burned before I got to it. Have visited a great many twice during the year. I am giving nearly all my time to visiting schools,

and school work. I am supplying all the schools with the Course of Study sent by you, and hope to have it adopted by most schools this year. We are doing all we can to raise the standard of our teachers. I hope to send you a more full account of our work soon.

Yours truly,

H. C. FOXWORTHY,
Secretary.

STATISTICAL TABLES.

STATISTICAL TABLES.

TABLE I.

Comparative Summary of Statistics for the Years 1888 and 1889.

Items.	1888.	1889.	Increase.	Decrease.
<i>Districts and Schools.</i>				
Number of townships and independent districts reporting.....	1,228	1,236	8	.....
Number of graded school districts.....	482	503	21	.....
Number of ungraded school districts.....	6,605	6,642	37	.....
Total.....	7,087	7,145	58	.....
School census of graded school districts.....	318,941	329,184	10,243	.....
School census of ungraded school districts.....	310,982	310,885	.....	97
Total.....	629,923	640,069	10,146	.....
Enrollment in graded schools.....	197,902	201,087	3,265	.....
Enrollment in ungraded schools.....	227,416	222,517	.....	4,899
Total.....	425,318	423,604	.....	1,614
Percentage of attendance in graded schools..	62.	61.	.....	1.
Percentage of attendance in ungraded schools	73.1	71.5	.....	1.6
Percentage for the State.....	67.5	66.2	.....	1.3
Number of districts reporting having maintained school.....	7,013	7,046	33	.....
Average duration of schools in months in graded schools.....	9.5	9.4	.....	.1
Average duration of schools in months in ungraded schools.....	7.5	7.6	.1	.....
Average for the State.....	7.6	7.7	.1	.....
Number of private and select schools reported	294	312	8	.....
Number of men teachers in such schools.....	266	277	11	.....
Number of women teachers in such schools..	475	422	.....	32
Estimated number of pupils attending such schools.....	31,073	34,179	3,106	.....

SUPERINTENDENT'S REPORT.

TABLE I.—*Continued.*

Items.	1888.	1889.	Increase.	Decrease.
<i>Teachers and their Employment.</i>				
Number of teachers necessary to supply graded schools.....	3,769	4,017	248	.....
Number of teachers necessary to supply ungraded schools.....	6,614	6,620	6	.....
Total.....	10,383	10,637	254	.....
Number of men teachers employed in graded schools.....	657	681	24	.....
Number of men teachers employed in ungraded schools.....	8,116	8,000	.....	116
Total.....	8,773	8,681	.....	92
Number of women teachers employed in graded schools.....	8,304	8,520	216	.....
Number of women teachers employed in ungraded schools.....	8,656	8,874	188	.....
Total.....	11,960	12,394	404	.....
Whole number of teachers employed in graded schools.....	8,961	4,201	240	.....
Whole number of teachers employed in ungraded schools.....	11,802	11,874	72	.....
Total.....	15,763	16,075	312	.....
Average number of months taught by men in graded schools....	8.8	8.9	.1	.....
Average number of months taught by men in ungraded schools.....	4.7	4.7	.....	.....
General average.....	5.4	5.5	.1	.....
Average number of months taught by women in graded schools.....	9.4	9.8	.....	.1
Average number of months taught by women in ungraded schools.....	4.2	4.2	.....	.....
General average.....	5.6	5.7	.1	.....
Total wages of male teachers in graded schools.....	\$449,121 79	\$467,366 55	\$18,244 76	.....
Total wages of male teachers in ungraded schools.....	477,114 38	462,291 71	\$14,822 67
Total.....	\$926,236 17	\$929,658 26	\$3,422 09

COMPARATIVE STATISTICS.

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TABLE I.—Continued.

Items.	1888.	1889.	Increase.	Decrease.
Total wages of female teachers in graded schools.....	\$1,243,219 71	\$1,323,432 89	\$80,213 18
Total wages of female teachers in ungraded schools.....	892,576 47	934,423 70	41,847 23	.....
Total.....	\$2,135,796 18	\$2,262,856 59	\$127,060 41	.....
Aggregate wages of all teachers in graded schools.....	\$1,692,341 50	\$1,795,799 44	\$103,457 94	.....
Aggregate wages of all teachers in ungraded schools.....	1,369,690 85	1,396,715 41	27,024 56	.....
Total.....	\$3,062,032 35	\$3,192,574 85	\$130,482 50	.....
Average monthly wages of male teachers in graded schools.....	\$77 66	\$77 85	.....	.31
Average monthly wages of male teachers in ungraded schools.....	32 91	32 95	.04	.....
Average wages of male teachers in all schools.....	\$45 67	\$46 31	.64	.....
Average monthly wages of female teachers in graded schools.....	\$39 99	\$40 65	.66	.....
Average monthly wages of female teachers in ungraded schools.....	24 41	25 01	.60	.....
Average wages of female teachers in all the schools.....	\$31 57	\$32 32	.76	.....
<i>Examination and Certification of Teachers.*</i>				
Number of public examinations held.....	461	489	28	.....
Number of applicants for regular certificates.....	15,907	15,979	72	.....
Number of first grade certificates granted.....	185	206	21	.....
Number of second grade certificates granted.....	498	554	56	.....
Number of third grade certificates granted.....	9,479	10,361	882	.....
Whole number of regular certificates granted.....	10,162	11,121	959	.....
Number of applicants for special certificates.....	1,324	1,368	.....	566
Number of special certificates granted.....	1,503	1,143	.....	360
Number teaching who held State or Normal School certificates.....	343	403	60	.....
Whole number of legally qualified teachers..	10,944	11,581	637	.....
Number licensed without previous experience in teaching.....	2,053	2,399	346	.....
Number of applicants who had attended State Normal School.....	1,951	2,216	265	.....

* No report received from Newaygo county.

SUPERINTENDENT'S REPORT.

TABLE I.—Continued.

Items.	1888.	1889.	Increase.	Decrease.
Number of applicants who had attended Institutes during the year	4,477	5,034	557	-----
<i>School Property.</i>				
Number of frame school houses	5,759	5,796	37	-----
Number of brick school houses	1,156	1,199	43	-----
Number of stone school houses	71	71	-----	-----
Number of log school houses	442	427	-----	15
Total	7,428	7,493	65	-----
Whole number of sittings in school houses	535,948	543,707	7,759	-----
Estimated value of property in graded school districts	\$8,652,197 00	\$9,100,487 00	\$448,290 00	-----
Estimated value of property in ungraded school districts	4,174,906 00	4,286,200 00	111,294 00	-----
Total	\$12,857,103 00	\$13,386,687 00	\$529,584 00	-----
Number of districts reporting dictionaries in school	3,730	4,178	448	-----
Number of districts reporting globes in school	1,947	2,070	123	-----
Number of districts reporting maps in school	2,434	2,873	439	-----
<i>Financial.</i>				
Balance on hand from preceding year	\$921,239 09	\$881,587 24	-----	\$39,651 85
Amount of one mill tax received	658,209 20	672,465 09	\$14,255 89	-----
Amount of primary school interest fund received	680,652 38	827,773 44	147,121 06	-----
Amount received from non-resident tuition	54,033 09	56,103 85	2,070 26	-----
Amount received from district taxes	3,232,623 86	3,396,030 29	163,406 93	-----
Amount received from all other sources	565,942 27	535,775 21	-----	30,167 06
Total resources	\$6,112,739 39	\$6,368,734 62	\$255,995 23	-----
Amount paid male teachers	\$928,482 02	\$929,721 11	\$3,239 09	-----
Amount paid female teachers	2,146,175 31	2,263,814 00	117,638 69	-----
Amount paid for building and repairs	805,132 43	641,661 48	-----	\$163,470 95
Amount paid on bonded indebtedness	314,659 51	327,885 32	13,225 81	-----
Amount paid for all other purposes	1,044,851 10	1,117,327 17	72,476 07	-----
Balance carried to next year	875,989 02	1,088,325 54	212,336 52	-----
Total expenditures, including balance on hand	\$6,112,739 39	\$6,368,734 62	\$255,995 23	-----

COMPARATIVE STATISTICS.

V

TABLE I.—Continued.

Items.	1888.	1889.	Increase.	Decrease.
Total expenditures in graded school districts.	\$3,256,610 48	\$3,280,019 15	\$23,408 67	.....
Total expenditures in ungraded school districts.....	1,980,189 89	2,000,389 93	20,200 04	.....
Total net expenditures.....	\$5,236,800 37	\$5,280,409 08	\$43,608 71	.....
Total bonded indebtedness of districts.....	\$1,570,862 05	\$1,622,014 71	\$51,152 66	.....
Total floating indebtedness of districts.....	176,133 48	146,740 12	.....	\$29,393 31
Total indebtedness.....	\$1,746,995 48	\$1,768,754 83	\$21,759 35	.....
Total indebtedness in graded school districts.	\$1,408,092 86	\$1,429,819 55	\$21,726 69	.....
Total indebtedness in ungraded school districts.....	338,902 62	338,935 28	14 66	.....
Total indebtedness.....	\$1,746,995 48	\$1,768,754 83	\$21,741 85	.....
Total amount due the districts.....	\$137,716 18	\$145,833 95	\$8,117 77	.....
<i>School Libraries.</i>				
Number of townships reporting libraries.....	519	505	.....	14
Number of districts of 100 children or more reporting libraries.....	312	319	7	.....
Number of districts of less than 100 children reporting libraries.....	857	786	.....	71
Total number of libraries.....	1,688	1,610	.....	78
Number of volumes in township libraries...	129,644	142,101	12,457	.....
Number of volumes in districts of 100 or more children.....	263,880	275,833	11,953	.....
Number of volumes in districts of less than 100 children.....	46,453	46,648	195	.....
Total number of volumes in all the libraries.....	439,977	464,582	24,605	.....
Amount of taxes voted for township libraries.	\$3,662 32	\$4,700 97	\$1,038 65	.....
Amount received from county treasurers for township libraries.....	23,123 63	28,303 76	5,180 12	.....
Number of townships diverting moneys to general school purposes.....	477	481	4	.....
Number of townships forfeiting library moneys.....	244	247	3	.....
Amount paid for support of township libraries	\$16,016 44	\$14,876 04	.....	\$1,140 40
Amount paid for support of district libraries.	57,899 76	69,502 45	\$11,602 69	.....

SUPERINTENDENT'S REPORT.

TABLE I.—Continued.

Items.	1888.	1889.	Increase.	Decrease.
<i>Teachers' Institutes.</i>				
Number of State institutes held.....	63	72	9	.....
Number of men enrolled at such institutes...	1,537	1,537	50	.....
Number of women enrolled at such institutes.	4,764	5,010	246	.....
Total enrollment.....	6,301	6,597	296	.....
Amount received from State treasurer for such institutes.....	\$1,833 42	\$1,917 47	\$84 05	.....
Amount received from county treasurers for such institutes.....	9,825 73	9,478 76	.....	\$346 97
Total amount expended.....	\$11,159 15	\$11,396 23	\$237 08	.....
<i>Miscellaneous.</i>				
Number of counties reporting county teachers' associations.....	54	58	4	.....
Amount of per diem received by examiners...	\$10,323 75	\$10,958 72	\$634 97	.....
Amount paid secretaries of county boards for salaries.....	61,125 00	62,060 00	935 00	.....
Total compensation.....	\$71,448 75	\$73,018 72	\$1,569 97	.....
Amount allowed by supervisors for expenses of county boards.....	\$2,503 47	\$3,687 14	\$1,183 67	.....
Amount paid and due township inspectors for services.....	15,406 31	14,926 72	.....	\$477 59
Amount paid chairmen of boards of inspectors	23,072 46	23,781 75	709 29	.....
Total amount of primary school interest fund apportioned.....	\$816,343 79	\$922,449 83	\$106,106 04	.....
Rate per capita, May apportionment.....	\$0 66	\$0 73	\$0 07	.....
Rate per capita, November apportionment....	66	74	08	.....
Rate per capita for year.....	\$1 32	\$1 47	\$0 15	.....

TABLE II.

Eighth Semi-Annual Apportionment of the Primary School Interest Fund, May 10, 1889; Rate Per Capita, 73 Cents.

Counties.	Whole number of children.	Number included in apportionment.	Amount apportioned.
Totals.....	680,001	627,019	\$457,835 47
Alcona.....	1,433	1,402	\$1,023 46
Alger.....	197	183	133 59
Allegan.....	12,580	12,580	9,183 40
Alpena.....	4,642	4,624	3,375 52
Antrim.....	3,066	3,026	2,208 98
Arenac.....	1,620	1,617	1,180 41
Baraga.....	834	756	551 88
Barry.....	7,725	7,675	5,602 75
Bay.....	16,489	16,354	11,938 42
Benzie.....	1,643	1,643	1,199 39
Berrien.....	12,381	12,381	9,068 13
Branch.....	7,630	7,630	5,569 90
Calhoun.....	12,164	12,160	8,876 80
Cass.....	6,081	6,081	4,439 13
Charlevoix.....	3,068	3,046	2,223 58
Cheboygan.....	3,480	3,418	2,495 14
Chippewa.....	3,161	3,060	2,233 80
Clare.....	1,994	1,994	1,455 62
Clinton.....	3,457	3,457	2,517 61
Crawford.....	712	695	507 35
Delta.....	3,836	3,769	2,751 37
Eaton.....	9,654	9,629	7,029 17
Emmet.....	2,424	2,383	1,739 59
Genesee.....	11,760	11,760	8,584 80
Gladwin.....	745	687	501 51
Gogebic.....	1,863	1,797	1,311 81
Grand Traverse.....	3,810	3,810	2,781 30
Gratiot.....	9,238	9,076	6,625 48
Hillsdale.....	8,868	8,868	6,473 64
Houghton.....	10,803	10,753	7,849 69
Huron.....	10,481	10,481	7,651 13

SUPERINTENDENT'S REPORT.

TABLE II.—*Continued.*

Counties.	Whole number of children.	Number included in ap- portionment.	Amount apportioned.
Ingham.....	10,724	10,692	\$7,805 16
Ionia.....	9,705	9,705	7,064 65
Iosco.....	3,921	3,901	2,847 73
Iron.....	869	869	634 37
Isabella.....	6,053	5,902	4,308 46
Isle Royal.....			
Jackson.....	12,593	12,593	9,192 89
Kalamazoo.....	11,064	11,064	8,076 72
Kalkaska.....	1,570	1,570	1,146 10
Kent.....	29,233	29,233	21,340 09
Keweenaw.....	991	991	723 43
Lake.....	2,061	2,059	1,503 07
Lapeer.....	10,077	10,009	7,306 57
Leelanaw.....	2,652	2,589	1,889 97
Lenawee.....	13,872	13,865	10,121 45
Livingston.....	6,231	6,214	4,536 22
Luce.....	394	373	272 29
Mackinac.....	1,925	1,876	1,369 48
Macomb.....	10,664	10,649	7,773 77
Manistee.....	7,065	7,041	5,139 93
Manitou.....	435	435	317 55
Marquette.....	10,375	10,375	7,573 75
Mason.....	4,706	4,700	3,431 00
Mecosta.....	6,845	6,767	4,939 91
Menominee.....	6,907	6,877	5,020 21
Midland.....	3,396	3,287	2,399 51
Missaukee.....	1,117	1,051	767 23
Monroe.....	11,525	11,525	8,413 25
Montcalm.....	10,676	10,580	7,723 40
Montmorency.....	371	364	265 72
Muskegon.....	13,446	13,309	9,715 57
Newaygo.....	6,118	6,118	4,466 14
Oakland.....	11,072	11,072	8,082 56
Oceana.....	4,946	4,887	3,567 51
Ogemaw.....	1,327	1,207	881 11
Ontonagon.....	838	811	592 03
Osceola.....	4,932	4,962	3,622 26
Oscoda.....	429	429	313 17
Otsego.....	1,304	1,295	945 35

APPORTIONMENT FOR MAY, 1889.

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TABLE II.—*Continued.*

Counties.	Whole number of children.	Number included in ap- portionment.	Amount apportioned.
Ottawa.....	12,507	12,459	\$9,085 07
Presque Isle.....	1,560	1,324	966 52
Roscommon.....	445	389	283 97
Saginaw.....	26,330	26,330	19,220 90
St. Clair.....	17,111	17,111	12,491 08
St. Joseph.....	7,335	7,289	5,320 97
Sanilac.....	11,544	11,844	a 8,738 52
Schoolcraft.....	994	978	713 94
Shiawassee.....	9,082	8,996	6,567 08
Tuscola.....	10,819	10,622	7,754 06
Van Buren.....	9,356	9,278	b 6,792 14
Washtenaw.....	13,041	13,041	9,519 93
Wayne.....	81,094	81,094	59,198 62
Wexford.....	3,225	3,223	2,352 79

a Including \$92.40 deficiency, May and November, 1888.
b Including \$19.20 deficiency, May and November, 1888.

TABLE III.

Ninth Semi-Annual Apportionment of the Primary School Interest Fund November 10, 1889; Rate Per Capita, 74 Cents.

Counties.	Whole number of children.	Number included in apportionment.	Amount apportioned.
Totals.....	630,001	627,441	\$464,614 36
Alcona.....	1,433	1,402	\$1,037 48
Alger.....	197	183	135 42
Allegan.....	12,580	12,580	9,309 20
Alpena.....	4,642	4,624	3,421 76
Antrim.....	3,066	3,062	^a 2,292 16
Arenac.....	1,620	1,617	1,196 58
Baraga.....	834	756	559 44
Barry.....	7,725	7,675	5,679 50
Bay.....	16,489	16,354	12,101 96
Benzie.....	1,643	1,643	1,215 82
Berrien.....	12,381	12,381	9,161 94
Branch.....	7,630	7,630	5,646 20
Calhoun.....	12,164	12,160	8,998 40
Cass.....	6,081	6,081	4,499 94
Charlevoix.....	3,068	3,046	2,254 04
Cheboygan.....	3,480	3,458	^b 2,588 12
Chippewa.....	3,161	3,060	2,264 40
Clare.....	1,994	1,994	1,475 56
Clinton.....	8,457	8,457	6,258 18
Crawford.....	712	695	514 30
Delta.....	3,836	3,769	2,789 06
Eaton.....	9,654	9,629	7,125 46
Emmet.....	2,424	2,383	1,763 42
Genesee.....	11,760	11,760	8,702 40
Gladwin.....	745	687	508 38
Gogebic.....	1,853	1,797	1,329 78
Grand Traverse.....	3,810	3,810	2,819 40
Gratiot.....	9,288	9,183	^c 6,878 49

^a Including \$26.28 deficiency, May apportionment, 1889.

^b Including 29.20 deficiency, May apportionment, 1889.

^c Including 78.07 deficiency, May apportionment, 1889.

TABLE III.—Continued.

Counties.	Whole number of children.	Number included in ap- portionment.	Amount apportioned.
Hillsdale	8,868	8,866	\$6,562 32
Houghton	10,803	10,753	7,957 22
Huron	10,481	10,481	7,755 94
Ingham	10,724	10,692	7,912 08
Ionia	9,705	9,705	7,181 70
Iosco	3,921	3,901	2,886 74
Iron	869	869	643 06
Isabella	6,053	5,902	4,367 48
Ile Royal			
Jackson	12,598	12,598	9,318 82
Kalamazoo	11,064	11,064	8,187 36
Kalkaska	1,570	1,570	1,161 80
Kent	29,233	29,233	21,632 42
Keweenaw	991	991	733 34
Lake	2,061	2,059	1,523 66
Lapeer	10,077	10,009	7,406 66
Leelanaw	2,652	2,621	d 1,962 90
Lenawee	13,872	13,865	10,200 10
Livingston	6,231	6,214	4,598 36
Luce	304	373	276 02
Mackinac	1,925	1,876	1,388 24
Macomb	10,664	10,649	7,880 26
Manistee	7,065	7,041	5,210 34
Marion	435	435	321 90
Marquette	10,375	10,375	7,677 50
Mason	4,708	4,700	3,478 00
Mecosta	6,845	6,767	5,007 58
Menominee	6,907	6,877	5,088 98
Midland	8,896	8,287	2,432 88
Missaukee	1,117	1,051	777 74
Monroe	11,525	11,525	8,528 50
Montcalm	10,676	10,580	7,829 20
Montmorency	371	364	269 36
Muskegon	13,446	13,309	9,848 06
Newaygo	6,118	6,118	4,527 32
Oakland	11,072	11,072	8,198 28
Oceana	4,946	4,887	3,616 38
Ogemaw	1,327	1,207	893 18

d Including \$23.36 deficiency, May apportionment, 1889.

SUPERINTENDENT'S REPORT.

TABLE III.—*Continued.*

Counties.	Whole number of children.	Number included in ap- portionment.	Amount apportioned.
Ontonagon	838	811	\$600 14
Osceola	4,982	4,982	3,671 88
Oscoda	429	429	317 46
Otsego	1,304	1,295	958 30
Ottawa	12,507	12,459	9,219 66
Presque Isle	1,560	1,324	979 76
Roscommon	445	389	287 86
Saginaw	26,830	26,830	19,484 20
St. Clair	17,111	17,111	12,662 14
St. Joseph	7,835	7,289	5,393 86
Sanilac	11,844	11,844	8,764 56
Schoolcraft	994	978	723 72
Shiawassee	9,082	8,996	6,657 04
Tuscola	10,819	10,785	e 8,099 89
Van Buren	9,856	9,322	f 6,920 40
Washtenaw	13,041	13,041	9,650 34
Wayne	81,094	81,094	60,009 56
Wexford	3,225	3,223	2,385 02

e Including \$118.79 deficiency, May apportionment, 1889.

f Including 32.12 deficiency, May apportionment, 1889.

GENERAL SCHOOL STATISTICS.

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TABLE IV.

General School Statistics, as Reported by School Inspectors for the year ending September 2, 1889.

Counties.	No. of townships and cities reporting.	Whole No. of school districts.	No. of districts that maintained school.	No. of graded school districts.	No. of children between five and twenty years of age.	No. of children that attended public schools.	Average No. of months school.	No. of school-houses and material of construction.				Whole No. of sittings provided in school-houses.	Estimated valuation of school property.
								Frame.	Brick.	Stone.	Log.		
Totals.....	1,236	7,145	7,046	508	640,069	428,604	7.7	5,796	1199	71	427	543,707	\$18,386,637 00
Alcona.....	8	25	25	1	1,492	1,083	7.6	17	----	----	6	1,194	\$15,775 00
Alger.....	5	10	10	1	278	227	7.8	5	1	----	8	851	7,895 00
Allegan.....	24	184	184	16	12,683	9,684	7.7	170	25	----	----	18,075	247,180 00
Alpena.....	8	23	21	1	5,174	2,637	5.3	39	1	----	10	3,247	72,098 00
Antrim.....	15	69	67	3	3,103	2,427	6.5	47	2	----	17	3,094	58,635 00
Arenac.....	11	29	28	4	1,711	1,256	6.9	23	1	----	4	1,834	25,773 00
Baraga.....	4	12	11	3	1,148	799	7.5	8	----	----	3	900	17,150 00
Barry.....	17	147	147	5	7,670	6,358	7.7	183	14	----	2	8,947	143,370 00
Bay.....	15	55	53	4	18,197	9,947	7.6	56	11	----	5	9,674	332,340 00
Benzie.....	12	43	43	2	1,629	1,394	6.6	44	----	----	3	1,979	28,550 00
Berrien.....	21	149	149	18	12,619	9,550	7.8	117	42	----	----	12,511	328,855 00
Branch.....	17	180	180	6	7,633	6,306	8.	63	40	11	----	8,706	202,145 00
Calhoun.....	23	163	162	8	12,500	8,668	8.	135	26	6	----	12,196	487,775 00
Cass.....	16	116	115	5	6,045	4,964	8.1	89	37	----	----	6,566	139,255 00
Charlevoix.....	16	69	67	4	3,135	2,400	6.4	59	2	----	8	3,621	64,480 00
Cheboygan.....	14	50	48	2	3,579	2,228	6.4	35	1	----	15	2,855	32,318 00
Chippewa.....	9	38	38	1	3,297	2,139	6.4	21	2	----	17	2,736	49,180 00
Clare.....	11	36	35	3	1,923	1,482	7.3	30	1	----	9	2,238	36,010 00
Clinton.....	16	129	129	8	8,583	6,061	7.8	102	28	----	----	8,795	154,525 00
Crawford.....	9	40	37	1	742	539	5.4	32	----	----	7	1,546	26,043 00
Delta.....	13	36	34	5	4,166	2,896	7.	25	1	----	9	2,415	61,820 00
Eaton.....	18	147	147	10	9,670	8,064	7.8	118	29	----	----	10,027	183,590 00
Emmet.....	12	60	58	2	2,511	1,662	5.9	46	----	----	14	2,948	32,742 00
Genesee.....	20	159	159	12	11,555	8,889	8.1	148	29	----	----	12,105	313,680 00
Gladwin.....	8	24	23	----	899	717	6.5	12	----	----	12	1,074	17,075 00
Gogebic.....	6	10	10	2	1,972	1,483	7.4	8	----	----	1	1,566	47,150 00
Grand Traverse..	13	65	64	4	3,916	2,917	6.8	67	2	----	3	3,897	80,995 00
Gratiot.....	17	129	129	8	9,360	7,415	7.8	119	9	----	2	9,226	143,830 00

SUPERINTENDENT'S REPORT.

TABLE IV.—Continued.

Counties.	No. of townships and cities reporting.	Whole No. of school districts.	No. of districts that maintained school.	No. of graded school districts.	No. of children between five and twenty years of age.	No. of children that attended public schools.	Average No. of months school.	No. of school-houses and material of construction.				Whole No. of sittings provided in school-houses.	Estimated valuation of school property.
								Frame.	Brick.	Stone.	Log.		
Hillsdale.....	19	167	167	10	8,667	7,067	8.	107	56	9	....	10,669	\$241,490 00
Houghton.....	10	25	19	12	11,093	6,552	7.4	14	1	1	2	8,412	117,700 00
Huron.....	27	106	106	11	10,741	6,883	7.8	92	7	....	11	7,961	98,732 00
Ingham.....	17	135	135	10	10,641	8,321	8.2	107	38	....	....	10,275	260,136 00
Ionia.....	17	144	144	10	9,800	7,506	8.	119	31	1	1	10,659	209,495 00
Iosco.....	12	25	25	4	4,293	2,150	6.6	25	....	....	2	2,231	30,466 00
Iron.....	6	11	8	3	1,036	759	6.7	7	....	....	2	842	21,020 00
Isabella.....	16	100	100	2	6,255	4,609	7.3	83	3	....	14	5,999	76,745 00
Isle Royal.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jackson.....	20	158	158	10	12,674	9,238	8.5	114	57	1	....	12,428	373,870 00
Kalamazoo.....	17	138	138	8	11,511	7,896	7.9	111	35	1	....	10,666	349,850 00
Kalkaska.....	12	53	51	1	1,542	1,320	6.1	49	1	....	2	2,850	38,150 00
Kent.....	25	218	217	19	30,506	21,173	8.2	189	47	....	3	23,898	934,415 00
Keweenaw.....	7	9	9	2	952	625	8.5	9	....	....	1	1,098	17,850 00
Lake.....	13	50	47	4	2,059	1,583	6.3	39	2	....	5	2,811	36,370 00
Lapeer.....	19	138	138	12	10,091	7,706	8.1	123	12	1	....	10,193	163,855 00
Leelanaw.....	11	53	53	2	2,683	1,777	6.2	40	1	1	10	2,564	27,592 00
Lenawee.....	24	199	196	15	13,982	10,296	8.3	100	101	8	....	14,076	378,365 00
Livingston.....	16	135	134	5	6,851	5,136	8.1	119	18	3	....	7,696	133,260 00
Luce.....	3	10	6	1	443	340	4.2	3	....	....	3	320	7,125 00
Mackinac.....	11	32	31	2	1,782	1,154	5.2	12	1	....	15	1,634	33,023 00
Macomb.....	15	112	112	10	10,702	6,265	8.3	100	18	....	....	8,713	190,065 00
Manistee.....	13	52	52	5	7,258	4,237	6.9	49	3	....	5	5,099	129,949 00
Manitou.....	3	4	4	....	351	186	6.5	2	....	....	3	575	1,600 00
Marquette.....	16	36	34	9	10,908	6,640	7.9	34	4	2	8	6,313	227,325 00
Mason.....	15	55	55	4	4,994	3,718	7.1	52	5	....	6	4,523	124,973 00
Mecosta.....	17	100	98	6	6,897	5,259	7.3	89	4	....	9	6,546	128,165 00
Menominee.....	12	44	43	7	7,432	4,888	8.2	41	3	....	8	5,046	106,545 00
Midland.....	15	60	59	3	3,510	2,448	7.5	45	5	....	13	3,619	69,325 00
Missaukee.....	12	44	44	2	1,285	983	6.8	36	....	....	6	1,695	26,420 00
Monroe.....	16	137	137	4	11,547	7,090	7.9	70	67	2	....	9,367	167,000 00
Montcalm.....	22	126	125	11	10,593	8,080	8.3	130	3	....	6	10,410	150,862 00
Montmorency.....	6	23	21	1	396	309	5.3	6	....	....	16	661	9,143 00
Muskegon.....	17	89	87	7	13,978	9,151	7.	85	14	....	7	8,988	346,945 00
Newaygo.....	22	109	106	4	6,035	4,595	7.4	91	4	....	11	6,423	88,700 00
Oakland.....	26	214	213	15	11,007	8,957	7.8	172	35	14	....	14,195	306,040 00

TABLE IV.—Continued.

Counties.	No. of townships and cities reporting.	Whole No. of school districts.	No. of districts that maintained school.	No. of graded school districts.	No. of children between five and twenty years of age.	No. of children that attended public schools.	Average No. of months school.	No. of school-houses and material of construction.				Whole No. of sittings provided in school-houses.	Estimated valuation of school property.
								Frame.	Brick.	Stone.	Log.		
Oceana	16	88	85	4	5,024	3,869	7.	78	4	....	6	5,015	\$68,480 00
Ogemaw	16	42	40	1	1,397	1,117	6.2	35	....	....	6	1,765	25,390 00
Ontonagon	7	16	10	3	907	471	4.4	11	....	....	2	1,058	12,250 00
Osceola	16	91	87	5	5,107	3,797	6.7	83	....	....	9	4,925	60,615 00
Oscoda	9	30	24	....	451	324	4.	18	....	....	9	833	9,406 00
Otsego	9	40	40	1	1,257	900	7.	35	....	....	8	2,086	22,697 00
Ottawa	17	121	120	17	12,883	8,994	8.2	107	20	1	1	10,937	190,485 00
Presque Isle	10	32	30	1	1,646	945	4.6	13	....	....	23	1,856	17,350 00
Roscommon	8	20	16	2	505	368	4.6	9	....	....	10	542	8,540 00
Saginaw	30	149	149	10	27,706	15,308	8.1	133	28	....	7	17,179	567,596 00
St. Clair	26	155	154	9	17,478	11,108	7.9	143	20	....	3	13,626	278,410 00
St. Joseph	16	125	125	9	7,303	6,102	8.4	93	32	2	....	8,999	242,210 00
Sanilac	26	138	135	12	11,997	8,628	8.4	123	6	....	7	9,772	108,545 00
Schoolcraft	6	18	17	1	793	801	6.5	12	....	....	7	965	13,010 00
Shiawassee	18	126	123	10	9,152	7,119	8.1	100	19	....	1	9,505	219,726 00
Tuscola	23	144	143	12	10,784	7,971	7.8	126	16	....	3	10,022	155,665 00
Van Buren	18	154	154	14	9,245	7,784	7.8	135	22	....	....	11,364	208,775 00
Washtenaw	22	168	168	8	12,877	8,900	8.2	108	64	7	....	11,731	441,100 00
Wayne	20	151	151	17	79,228	28,454	8.7	110	91	....	....	34,839	1,694,665 00
Wexford	16	68	67	2	3,241	2,615	6.4	58	1	....	12	3,592	80,185 00

TABLE V.

Employment of Teachers as Reported by School Inspectors, for the year ending September 2, 1889.

Counties.	No. of teachers required.		Whole No. teachers employed.		Aggregate No. of months taught by—		Total wages of teachers.			Average monthly wages.	
	Graded schools.	Un-graded schools.	Men.	Women.	Men.	Women.	Men.	Women.	Total.	Men.	Women.
Totals.....	4,017	6,620	3,681	12,394	20,074	70,047	\$929,658 28	\$2,262,856 59	\$3,192,514 85	\$46 81	\$32 80
Alcona.....	8	24	10	27	69	143	\$3,099 00	\$4,972 25	\$8,071 25	\$44 91	\$34 84
Alger.....	2	9	5	10	36	49	1,835 87	2,165 00	4,000 87	51 00	44 18
Allegan.....	57	167	88	321	430	1,388	17,492 36	37,522 88	55,015 24	40 68	27 03
Alpena.....	30	37	14	80	66	490	5,520 00	16,632 88	22,152 88	83 66	33 94
Antrim.....	20	66	34	88	163	437	6,990 26	13,108 70	20,098 95	42 88	30 00
Arenac.....	8	25	12	35	56	182	2,021 31	5,788 50	7,809 81	36 10	31 80
Baraga.....	9	8	4	15	32	117	2,330 00	5,124 00	7,454 00	72 81	43 79
Barry.....	16	142	93	243	406	963	14,143 19	23,870 74	48,013 93	34 83	24 79
Bay.....	139	52	30	174	246	1,521	15,198 38	57,850 19	73,048 57	61 75	38 03
Benzie.....	11	41	19	63	86	296	3,432 38	8,691 87	12,124 25	39 91	29 36
Berrien.....	93	138	81	265	442	1,490	20,855 16	46,043 00	66,898 16	47 18	30 90
Branch.....	49	115	81	253	355	1,133	14,509 75	29,158 04	43,667 79	40 87	25 62
Calhoun.....	100	156	80	334	396	1,814	17,762 50	51,078 48	68,840 98	44 85	28 15
Cass.....	29	111	86	164	430	760	16,852 49	22,116 31	38,968 80	39 19	29 10
Charlevoix....	14	66	24	91	129	424	5,112 94	11,866 87	16,979 81	39 64	27 99
Cheboygan....	16	47	25	60	144	319	6,863 60	10,170 47	17,034 07	47 66	31 88
Chippewa.....	14	37	17	37	112	265	4,953 00	8,829 25	13,782 25	44 22	33 32
Clare.....	11	33	15	55	67	275	3,543 75	7,997 47	11,541 22	52 89	29 08
Clinton.....	42	121	85	204	337	975	14,154 22	27,037 95	41,212 17	38 57	27 75
Crawford.....	5	39	14	49	62	196	2,361 50	5,679 20	8,040 70	38 09	29 43
Delta.....	22	31	12	53	79	339	4,550 05	12,911 00	17,461 05	57 60	38 09
Eaton.....	61	137	91	270	423	1,242	17,138 47	34,853 43	51,991 90	40 52	28 06
Emmet.....	16	58	23	79	99	396	3,954 50	11,259 25	15,213 75	39 94	29 20
Genesee.....	79	133	84	277	450	1,519	18,161 30	43,303 48	61,464 78	40 36	28 51
Gladwin.....	-----	24	2	33	13	164	640 00	4,996 95	5,636 95	49 25	30 47
Gogebio.....	19	7	4	23	40	184	4,600 00	8,940 50	13,540 50	115 00	48 59
Gd. Traverse..	24	61	24	101	125	504	6,147 50	17,490 03	23,637 53	49 18	34 70
Gratiot.....	43	121	79	213	414	935	15,472 34	25,275 35	40,747 69	37 37	27 03
Hillsdale.....	48	157	101	317	458	1,277	17,797 95	29,743 67	47,541 62	38 86	23 29
Houghton.....	116	11	22	109	205	999	18,480 00	45,973 83	64,453 83	90 15	46 04

EMPLOYMENT OF TEACHERS.

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TABLE V.—Continued.

Counties.	No. of teachers required.		Whole No. teachers employed.		Aggregate No. of months taught by—		Total wages of teachers.			Average monthly wages.	
	Graded schools.	Un-graded schools.	Men.	Women.	Men.	Women.	Men.	Women.	Total.	Men.	Women.
Huron.....	31	97	51	90	393	698	\$15,834 00	\$19,878 50	\$35,712 50	\$40 29	\$28 46
Ingham.....	83	125	89	289	406	1,411	17,639 25	40,633 61	58,272 86	43 45	28 80
Ionia.....	66	134	84	246	438	1,246	17,931 88	36,453 48	54,385 36	40 96	29 26
Iosco.....	26	20	6	55	45	386	3,645 50	12,692 25	16,337 75	81 01	32 88
Iron.....	9	11	2	13	20	115	1,400 00	5,605 00	7,005 00	70 00	48 74
Isabella.....	14	98	55	180	245	625	8,682 15	18,246 25	26,928 40	35 44	29 19
Isle Royal.....											
Jackson.....	97	149	89	339	455	1,758	21,847 13	54,613 31	75,960 44	44 72	31 07
Kalamazoo.....	91	130	70	283	332	1,585	15,655 86	48,743 90	64,399 76	47 16	30 75
Kalkaska.....	6	51	17	74	83	301	3,420 50	8,946 95	12,367 45	41 21	29 72
Kent.....	286	199	95	580	548	3,890	30,629 23	151,979 85	182,609 08	55 89	39 07
Keweenaw.....	6	7	7	6	63	49	4,230 00	2,156 00	6,386 00	67 14	44 00
Lake.....	16	44	19	60	103	306	4,517 87	9,122 75	13,640 62	43 86	29 83
Lapeer.....	57	126	76	177	498	1,066	19,596 40	27,693 86	47,290 26	39 35	25 98
Leelanaw.....	5	51	23	60	97	261	3,370 75	7,414 94	10,785 69	34 75	23 40
Lenawee.....	96	184	119	370	586	1,908	26,203 70	50,188 16	76,391 86	44 72	26 30
Livingston.....	31	129	87	231	391	986	18,515 35	20,883 80	34,399 15	34 82	21 18
Luce.....	3	9	2	8	20	43	1,400 00	1,770 00	3,170 00	70 00	41 16
Mackinac.....	13	29	9	40	59	211	2,911 75	7,012 92	9,924 67	49 35	33 23
Macomb.....	50	102	48	149	325	993	14,806 75	26,931 10	41,737 85	45 56	27 12
Manistee.....	55	44	23	96	165	676	9,738 40	26,206 79	35,947 19	59 02	38 77
Manitou.....		4	2	4	7	19	210 00	499 00	709 00	30 00	26 26
Marquette.....	96	26	19	106	161	957	14,046 35	46,769 97	60,816 32	37 24	48 87
Mason.....	41	52	26	96	154	596	7,319 50	21,995 25	29,314 75	47 53	36 90
Mecosta.....	36	94	39	158	208	818	8,667 75	26,589 94	35,257 69	41 14	32 51
Menominee.....	60	37	14	91	125	732	8,670 00	32,241 32	40,911 32	69 36	43 69
Midland.....	16	56	20	96	96	495	3,962 50	15,663 21	19,625 71	41 28	31 64
Missaukee.....	4	42	18	49	98	202	3,642 00	6,678 05	10,320 05	37 14	33 06
Monroe.....	26	133	72	203	370	961	14,082 18	24,175 31	38,207 49	37 92	25 16
Montcalm.....	63	121	65	266	334	1,293	15,129 45	35,764 80	50,894 25	45 30	27 63
Montmorency.....	2	25	10	20	44	85	1,413 00	2,439 50	3,852 50	32 11	23 58
Muskegon.....	126	72	41	213	265	1,511	14,846 38	58,393 38	73,239 76	56 02	38 64
Newaygo.....	19	105	32	172	195	725	8,371 00	20,692 06	29,063 06	42 93	23 54
Oakland.....	77	199	101	314	584	1,724	26,017 92	42,667 80	68,685 72	44 55	24 75
Oceana.....	16	83	51	111	240	508	9,693 00	14,449 91	24,142 91	40 38	23 44
Ogemaw.....	4	41	16	42	71	220	2,606 50	6,969 75	9,576 25	36 67	31 68

SUPERINTENDENT'S REPORT.

TABLE V.—Continued.

Counties.	No. of teachers required.		Whole No. teachers employed.		Aggregate No. of months taught by—		Total wages of teachers.			Average monthly wages.	
	Graded schools.	Un-graded schools.	Men.	Women.	Men.	Women.	Men.	Women.	Total.	Men.	Women.
Ontonagon....	13	12	6	15	52	118	\$4,180 00	\$5,002 50	\$9,182 50	\$80 38	\$48 13
Osceola.....	23	87	35	122	191	601	8,215 25	17,476 60	25,691 85	43 01	28 08
Oscoda.....	-----	29	13	25	40	81	1,138 00	2,179 48	3,317 48	28 45	26 16
Otsego.....	3	39	15	48	89	223	3,858 32	6,534 16	9,892 48	37 73	29 80
Ottawa.....	82	103	59	189	404	1,218	18,298 28	34,010 75	52,309 03	45 29	27 92
Presque Isle..	4	31	22	17	97	74	3,090 35	2,141 51	5,231 86	31 85	28 94
Roscommon ..	4	18	3	21	15	104	711 65	3,305 06	4,016 71	47 44	31 78
Saginaw.....	182	139	87	322	554	2,394	33,606 00	87,709 03	121,315 03	60 66	36 63
St. Clair.....	83	146	52	256	329	1,637	16,204 00	47,150 15	53,854 15	49 55	28 80
St. Joseph.....	54	116	65	253	326	1,207	15,174 75	32,050 93	47,225 68	46 55	26 55
Sanilac	33	122	78	123	576	786	21,186 00	18,393 15	39,579 15	37 13	23 40
Schoolcraft...	7	17	7	23	39	133	2,110 00	6,112 30	8,222 30	54 10	45 96
Shiawassee ...	47	121	75	228	387	1,150	17,512 95	31,768 08	49,281 03	47 84	27 62
Tuscola.....	44	132	64	183	406	1,037	15,474 50	27,903 88	43,378 38	38 11	26 91
Van Buren....	60	140	106	230	510	1,138	19,696 05	32,569 10	52,267 15	38 62	28 61
Washtenaw...	105	161	95	305	546	1,780	30,213 14	52,799 92	83,013 06	55 33	32 47
Wayne.....	529	134	104	642	746	5,701	52,122 51	274,473 28	326,595 79	69 87	48 15
Wexford.....	22	65	34	107	143	508	6,289 75	17,641 00	23,930 75	43 98	35 11

TABLE VI.

Resources of School Districts as Reported by School Inspectors for the Year ending September 2, 1889.

Counties.	Moneys on hand, Sept. 3, 1888.	One Mill Tax.	Primary School Interest Fund.	Library moneys.	District taxes for all purposes.	Raised from all other sources.	Total resources for the year.
Totals	\$881,587 24	\$672,465 09	\$827,773 44	\$28,083 16	\$3,395,080 29	\$563,845 40	\$6,268,734 62
Alcona	\$2,877 34	\$1,184 13	\$1,716 18	\$4 73	\$10,052 44	\$618 00	\$16,452 82
Alger	1,000 15	1,367 55	67 18	-----	5,785 20	314 45	8,534 53
Allegan	15,423 50	13,395 83	17,080 85	536 61	48,159 93	6,577 78	101,174 00
Alpena	2,884 74	710 12	6,054 35	73 06	30,677 66	562 16	40,962 09
Antrim	5,159 07	2,752 18	3,626 98	2 78	25,187 82	5,034 95	41,763 78
Arenac	1,936 13	817 39	1,735 17	-----	9,664 74	3,040 53	17,198 96
Baraga	3,276 01	474 68	441 54	-----	9,972 14	508 73	14,678 10
Barry	8,018 01	9,066 81	10,301 28	641 85	35,338 50	7,045 26	70,411 71
Bay	20,565 52	4,597 16	21,962 66	53 07	94,942 70	19,257 61	161,378 71
Benzie	1,054 06	1,143 68	1,997 97	6 88	13,908 42	1,622 37	19,783 38
Berrien	17,525 65	13,019 69	16,290 88	1,082 73	68,049 65	6,865 12	122,833 72
Branch	18,536 05	13,339 15	10,125 02	197 22	42,252 44	2,773 60	87,223 48
Calhoun	12,362 76	17,548 08	16,287 93	720 11	77,394 71	5,177 80	129,491 89
Cass	10,672 14	11,897 00	8,086 82	113 82	28,439 41	4,467 24	63,626 43
Charlevoix	4,965 62	2,023 56	4,009 38	79 63	19,821 29	16,160 20	47,059 68
Cheboygan	6,583 62	2,996 01	4,239 62	857 92	16,983 64	2,642 04	33,806 85
Chippewa	2,234 63	3,656 85	3,827 21	1,030 60	17,645 96	2,457 00	30,852 25
Clare	3,713 09	2,709 83	2,134 57	12 93	16,565 07	307 61	25,443 10
Clinton	13,015 55	14,967 22	11,222 00	351 31	30,032 70	3,523 82	73,112 60
Crawford	5,530 62	2,569 34	981 49	88 16	9,975 36	3,500 64	22,645 61
Delta	5,285 05	2,955 91	3,579 16	134 74	23,015 82	5,097 58	45,068 26
Eaton	12,009 35	14,503 04	13,081 61	368 74	52,362 05	5,039 95	97,364 74
Emmet	3,569 41	1,096 42	2,980 22	7 39	17,724 99	1,664 98	27,043 41
Genesee	12,261 78	19,353 58	15,515 74	1,821 49	57,909 28	7,788 20	114,640 07
Gladwin	2,353 16	1,107 48	838 31	-----	8,853 83	459 68	13,112 46
Gogebic	6,899 28	4,168 00	1,544 75	562 82	29,669 50	866 39	43,710 74
Grand Traverse	4,279 25	3,344 25	4,151 39	42 42	30,403 44	7,598 76	49,819 51
Gratiot	13,318 82	7,190 61	11,372 67	301 62	41,931 13	8,002 18	82,117 03
Hillsdale	9,637 37	18,616 15	11,965 93	530 52	32,261 47	8,431 66	81,443 10
Houghton	49,490 92	32,779 87	15,317 66	363 50	57,615 01	12,074 17	167,641 13
Huron	10,296 15	4,920 57	14,075 02	99 12	32,010 25	2,742 22	64,143 83

SUPERINTENDENT'S REPORT.

TABLE VI.—Continued.

Counties.	Moneys on hand, Sept. 8, 1888.	One Mill Tax.	Primary School Interest Fund.	Library moneys.	District taxes for all purposes.	Raised from all other sources.	Total resources for the year.
Ingham	\$16,239 89	\$16,867 40	\$14,636 35	\$414 12	\$64,446 91	\$4,292 90	\$116,897 57
Ionia	14,201 26	14,437 50	13,250 41	428 27	44,356 86	10,823 42	97,497 72
Iosco	2,782 57	675 72	5,654 38	187 06	18,884 24	1,244 54	29,328 51
Iron	6,340 43	2,520 90	177 28	-----	5,567 00	6,374 78	20,980 89
Isabella	9,127 65	3,480 00	7,484 38	12 09	23,442 44	1,908 29	45,454 85
Isle Royal	-----	-----	-----	-----	-----	-----	-----
Jackson	15,126 91	22,373 46	16,756 96	584 12	63,369 07	5,236 31	123,446 83
Kalamazoo	18,001 01	20,782 80	14,771 36	1,288 96	60,464 28	4,179 03	\$119,497 44
Kalkaska	4,606 79	2,867 54	2,047 08	5 50	14,447 39	1,975 78	25,949 03
Kent	29,084 91	32,913 24	39,274 38	4,853 09	228,745 83	78,144 09	413,016 14
Keweenaw	5,287 45	2,272 60	1,249 43	12 73	5,354 61	378 84	14,555 66
Lake	5,823 43	840 56	2,358 85	95 88	15,563 82	897 55	25,579 54
Lapeer	13,399 13	11,682 24	13,361 86	293 35	42,353 21	6,545 55	87,635 34
Leelanaw	2,866 73	956 41	3,610 02	3 80	9,840 91	308 53	17,086 40
Lenawee	19,660 10	28,157 30	18,328 85	969 34	56,577 67	11,378 73	135,071 99
Livingston	9,640 86	12,299 85	8,427 08	261 19	23,231 08	3,099 01	61,958 82
Luce	1,282 59	1,173 48	182 82	-----	2,980 00	65 57	5,684 46
Mackinac	2,256 68	714 57	2,195 16	191 68	14,730 96	13,754 86	33,843 91
Macomb	12,525 34	16,184 46	14,746 39	204 02	29,128 09	3,665 34	76,453 64
Manistee	6,891 71	4,455 24	8,590 81	274 86	44,047 72	5,836 45	69,646 79
Manitou	34 12	23 70	494 92	-----	238 27	142 00	963 01
Marquette	21,874 68	13,749 37	13,145 86	190 85	87,271 84	11,839 30	148,071 90
Mason	18,859 38	1,606 66	5,767 55	259 77	46,771 79	1,207 13	73,972 28
Mecosta	19,786 09	4,950 19	8,834 95	462 33	38,331 72	4,156 55	76,521 83
Menominee	17,139 31	6,826 75	8,393 37	827 47	53,560 32	19,079 26	105,825 48
Midland	7,959 69	1,656 99	4,323 57	94 60	25,379 85	2,657 91	42,077 90
Missaukee	7,701 18	2,128 81	1,000 26	30 89	12,141 45	1,683 98	24,686 57
Monroe	9,971 56	15,078 11	15,981 00	302 53	24,048 62	2,718 48	68,100 24
Montcalm	18,148 68	7,136 61	13,062 58	23 06	44,835 98	15,384 88	93,611 79
Montmorency	2,120 36	497 04	217 50	2 66	3,757 86	657 60	7,253 02
Muskegon	9,852 78	7,731 91	17,020 80	188 50	98,402 98	12,819 99	145,516 96
Newaygo	11,235 36	3,564 89	7,488 55	6 22	33,575 46	3,374 96	59,245 44
Oakland	12,677 28	22,749 28	14,593 17	719 27	55,478 50	6,230 18	112,447 68
Oceana	9,071 54	2,600 90	5,934 66	7 89	23,161 78	1,908 29	42,685 06
Ogemaw	3,658 85	1,026 37	1,680 40	162 84	10,631 95	667 50	17,827 41
Ontonagon	3,229 77	1,986 12	1,092 51	34 06	10,076 47	1,962 85	18,381 77
Osceola	6,639 16	3,401 64	6,434 22	77 99	29,343 62	2,761 97	48,658 60
Oscoda	1,519 24	338 48	380 17	-----	5,293 55	873 00	7,904 44
Otsego	4,063 60	1,850 97	1,662 88	31 83	10,120 38	449 20	17,678 36

TABLE VI.—*Continued.*

Counties.	Moneys on hand, Sept. 3, 1888.	One Mill Tax.	Primary School Interest Fund.	Library moneys.	District taxes for all purposes.	Raised from all other sources.	Total resources for the year.
Ottawa	\$12,294 43	\$11,305 81	\$16,932 90	\$80 27	\$45,896 13	\$2,622 60	\$89,132 14
Presque Isle	1,434 10	483 43	1,792 68	139 80	6,182 66	466 61	10,499 28
Roscommon	1,869 31	865 61	573 49	21 73	3,744 33	694 57	7,769 03
Saginaw	33,981 22	14,059 10	34,262 53	505 07	156,897 89	33,178 83	277,884 64
St. Clair	23,008 31	13,590 39	22,781 52	1,036 20	56,597 35	24,580 33	141,589 10
St. Joseph	8,928 85	14,673 86	9,941 74	243 69	37,310 38	7,851 28	78,949 78
Sanilac	11,176 97	5,414 90	16,290 24	218 46	35,311 68	7,947 03	76,359 27
Schoolcraft	2,164 92	1,773 84	1,211 36	155 46	9,480 91	2,223 79	16,990 28
Shiawassee	14,651 74	9,817 23	12,148 49	300 12	46,608 06	10,002 80	93,528 44
Tuscola	15,166 65	7,783 91	14,018 52	62 17	39,878 36	5,965 80	82,975 41
Van Buren	11,698 44	11,826 83	12,423 86	251 61	45,135 10	5,177 91	86,515 75
Washtenaw	30,409 67	30,208 09	17,760 91	508 20	56,849 33	19,979 33	155,715 53
Wayne	35,793 91	24,156 99	112,422 29	1,406 70	442,270 32	27,677 96	648,688 17
Wexford	12,152 36	2,168 10	4,014 40	65 67	25,356 76	9,518 76	57,276 05

TABLE VII.

Expenditures of School Districts as reported by School Inspectors for the year ending September 2, 1889.

Counties.	Paid teachers.	Paid for building and repairs.	Paid for library books and care of library.	Paid on bonded indebtedness.	Paid for all other purposes.	Total expenditures for the year, less amount on hand.	Amount on hand Sept. 2, 1889.
Totals.....	\$8,198,535 11	\$641,661 48	\$61,449 18	\$327,285 32	\$1,055,877 99	\$5,280,409 08	\$1,068,325 54
Alcona.....	\$8,080 75	\$528 28	.....	\$1,423 69	\$3,228 46	\$13,211 18	\$3,241 64
Alger.....	4,301 42	1,244 61	.....	91 56	1,696 34	7,333 93	1,200 60
Allegan.....	55,059 01	9,723 33	\$384 04	4,817 89	14,720 03	84,203 80	16,970 20
Alpena.....	22,104 88	8,650 29	333 04	445 00	6,151 09	37,684 30	3,277 79
Antrim.....	20,410 55	2,756 94	.....	3,750 14	5,803 57	32,221 20	9,542 58
Arenac.....	7,655 81	2,814 50	3 00	1,354 39	3,425 70	15,258 40	1,940 56
Baraga.....	7,615 00	494 39	75 00	521 74	3,059 39	11,765 52	2,907 58
Barry.....	37,839 73	3,836 79	170 02	4,663 94	9,883 94	56,444 42	13,967 29
Bay.....	73,108 57	33,867 52	252 13	2,596 50	23,841 88	138,666 60	22,712 12
Benzie.....	12,123 29	1,264 52	.....	1,190 94	2,774 92	17,353 67	2,379 71
Berrien.....	66,898 16	7,731 86	561 05	9,300 82	13,748 05	103,239 94	19,093 78
Branch.....	43,672 79	3,928 86	29 75	6,501 49	11,444 65	65,577 54	21,645 94
Calhoun.....	68,761 18	13,777 30	1,309 93	13,607 80	18,048 17	115,504 38	13,987 01
Cass.....	38,855 70	3,448 93	37 83	2,371 69	7,382 95	53,097 10	11,529 33
Charlevoix.....	17,153 17	16,774 55	49 00	1,955 45	5,226 88	41,159 05	5,900 63
Cheboygan.....	17,256 95	2,878 44	197 75	1,353 02	4,689 15	26,375 31	7,431 54
Chippewa.....	14,041 85	5,642 58	173 17	1,168 65	5,896 35	26,921 60	3,980 65
Clara.....	11,392 22	1,423 38	.....	2,073 85	4,648 73	19,538 18	5,904 92
Clinton.....	41,316 85	2,602 21	239 11	4,721 45	10,743 34	59,677 96	13,434 64
Crawford.....	7,924 70	2,371 39	11 00	747 83	3,634 78	14,689 70	7,955 91
Delta.....	17,381 05	4,423 91	488 64	2,351 27	13,940 10	38,589 97	6,478 29
Eaton.....	51,993 18	5,532 62	140 80	5,049 47	18,900 90	81,616 95	15,747 79
Emmet.....	15,176 92	1,728 89	32 39	1,887 42	4,303 79	23,129 41	3,914 00
Genesee.....	61,391 78	7,541 15	968 18	13,556 10	18,587 27	102,064 48	12,575 59
Gladwin.....	5,794 45	516 00	340 74	1,620 49	2,458 50	10,730 18	2,382 28
Gogebic.....	13,540 50	10,634 75	142 75	3,047 83	10,640 50	38,006 33	5,704 41
G'd Traverse.....	23,706 32	2,684 38	450 00	6,397 53	10,816 33	44,054 56	5,764 95
Gratiot.....	40,819 69	6,670 21	153 59	7,856 23	12,743 77	68,243 49	13,873 54
Hillsdale.....	47,529 31	3,639 16	224 68	2,857 23	13,751 23	71,001 61	10,441 49
Houghton.....	64,453 83	17,253 21	484 24	2,017 94	34,333 50	118,542 72	49,098 41

EXPENDITURES FOR SCHOOL DISTRICTS.

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TABLE VII—Continued.

Counties.	Paid teachers.	Paid for building and repairs.	Paid for library books and care of library.	Paid on bonded indebtedness.	Paid for all other purposes.	Total expenditures for the year, less amount on hand.	Amount on hand Sept. 2, 1889.
Huron	\$35,692 50	\$2,909 77	\$44 50	\$3,827 41	\$9,841 90	\$52,816 08	\$11,827 25
Ingham	58,217 56	11,832 89	1,071 81	3,239 73	26,968 09	101,880 08	15,567 49
Ionia	54,388 35	9,106 54	127 22	6,078 49	11,949 15	81,644 75	15,852 97
Iosco	16,203 48	2,022 68	92 25	379 17	6,843 79	25,541 37	8,787 14
Iron	7,005 00	1,230 87	179 40	716 86	8,591 20	12,722 83	8,257 56
Isabella	26,894 57	1,575 14	278 32	2,667 15	5,979 83	37,395 01	8,069 84
Ile Royal							
Jackson	75,943 94	6,069 52	202 18	8,416 18	22,486 28	108,118 10	15,328 73
Kalamazoo	65,072 78	5,070 30	2,320 46	6,026 52	16,890 74	95,380 78	24,116 66
Kalkaska	12,442 45	2,298 88	30 50	2,454 04	4,224 34	21,445 21	4,503 82
Kent	182,490 73	26,361 37	6,919 22	15,749 07	91,625 87	323,146 28	89,869 88
Keweenaw	6,386 00	645 90		202 84	1,681 89	8,916 63	5,639 03
Lake	18,519 07	492 67	50 00	1,343 40	4,735 73	20,140 87	5,438 67
Lapeer	47,416 39	7,068 03	96 83	7,854 13	11,726 38	74,161 29	13,474 05
Leelanaw	10,785 69	412 64	6 00	750 90	1,724 04	13,679 27	8,407 13
Lenawee	76,671 20	8,977 26	809 99	3,657 22	17,325 43	107,441 10	27,630 89
Livingston	34,331 15	2,545 06	29 84	4,906 13	10,152 88	51,967 16	9,991 66
Luce	2,920 00	183 00	8 00	420 00	888 90	4,369 90	1,314 56
Mackinac	9,747 67	6,922 89	15 75	10,074 25	3,966 23	30,726 79	8,117 12
Macomb	41,753 85	2,291 09	407 85	5,643 63	10,896 83	60,993 25	15,460 39
Manistee	35,902 19	6,562 47	700 86	4,835 16	13,046 37	61,047 05	8,599 74
Manitou	709 00	5 00			194 77	908 77	24 24
Marquette	60,816 22	12,255 75	566 40	7,600 08	31,080 22	112,268 67	35,803 23
Mason	29,314 75	23,307 38	414 47	11,900 91	5,295 43	70,232 94	3,739 34
Mecosta	35,290 07	5,238 48	199 40	6,852 88	9,446 18	57,027 01	19,494 82
Menominee	40,807 82	10,742 54	933 00	7,988 19	25,153 93	85,573 48	20,262 00
Midland	19,581 21	1,424 28	5 00	4,241 11	7,051 17	32,302 77	9,775 13
Missaukee	10,028 00	1,781 48	83 12	888 00	4,595 07	17,375 67	7,310 90
Monroe	38,182 74	3,954 58	317 40	4,296 96	3,147 03	54,888 71	13,211 53
Montcalm	50,887 50	3,753 89	199 92	3,286 07	17,084 35	75,211 73	23,400 06
Montmorency	8,217 27	501 79		50 00	1,389 30	5,158 36	2,094 66
Muskegon	73,209 76	20,895 38	1,700 92	9,347 34	26,004 64	131,158 04	14,358 92
Newaygo	29,168 06	3,874 42	62 00	2,048 60	9,823 31	44,976 39	14,269 05
Oakland	68,656 92	8,463 93	119 00	4,854 94	17,519 04	99,613 83	12,833 85
Oceana	24,151 91	3,044 16	3 00	1,509 78	5,466 64	34,175 49	8,509 57
Ogemaw	9,581 75	719 39		219 87	8,016 28	13,487 29	4,340 12
Ontonagon	9,182 50	3,803 41		351 63	1,017 94	14,357 48	4,024 29
Osceola	25,783 10	4,244 80	39 50	3,026 22	3,070 22	39,163 84	9,494 76

SUPERINTENDENT'S REPORT.

TABLE VII—Continued.

Counties.	Paid teachers.	Paid for building and repairs.	Paid for library books and care of library.	Paid on bonded indebtedness.	Paid for all other purposes.	Total expenditures for the year, less amount on hand.	Amount on hand Sept. 2, 1889.
Oscoda.....	\$3,570 75	\$919 18	-----	\$97 24	\$1,562 83	\$6,149 95	\$1,754 49
Otsego.....	9,864 18	468 97	\$8 20	1,238 23	2,531 45	14,109 08	3,569 33
Ottawa.....	52,809 03	8,611 58	458 75	4,478 64	13,444 48	74,297 46	14,834 68
Presque Isle...	5,275 70	1,313 81	82 54	304 48	2,126 11	9,102 64	1,396 64
Roscommon...	3,856 71	1,045 31	-----	296 11	927 09	6,125 22	1,643 81
Saginaw.....	121,208 63	41,699 73	1,926 27	12,562 43	43,597 45	220,969 51	56,895 18
St. Clair.....	64,219 45	21,638 85	550 78	5,729 98	21,739 63	113,878 19	27,710 91
St. Joseph.....	47,185 68	7,629 82	159 52	2,953 28	11,735 24	69,613 54	9,836 24
Sanilac.....	39,511 15	6,439 23	6 80	6,410 92	11,325 30	63,693 40	12,665 87
Schoolcraft...	8,222 30	1,038 10	62 00	195 48	2,563 19	12,081 07	4,909 21
Shiawassee....	49,377 03	9,068 82	132 10	5,901 22	12,770 17	77,249 34	16,279 10
Tuscola.....	43,463 78	6,100 92	146 42	4,171 74	14,473 02	68,355 88	14,519 58
Van Buren.....	52,852 40	3,483 60	90 00	4,433 87	12,411 26	72,771 13	13,744 62
Washtenaw...	83,039 06	30,080 38	785 55	5,324 71	21,559 95	140,789 65	14,925 88
Wayne.....	326,565 79	99,683 21	31,522 58	6,991 55	106,202 74	570,965 87	72,722 30
Wexford.....	23,905 75	8,514 43	169 13	3,356 73	9,028 43	44,974 47	12,801 58

TABLE VIII.

Miscellaneous Financial Statistics as reported by School Inspectors for the Year ending September 2, 1889.

Counties.	Bonded indebtedness of the districts.	Total indebtedness of the districts.	Amount due the districts.	Amount received by the districts for non-resident tuition.	Amount paid and due inspectors and members of school boards for services.	Amount paid and due township chairmen and officers for services.
Totals.....	\$1,622,014 71	\$1,768,754 83	\$145,833 95	\$56,103 35	\$14,928 72	\$23,781 75
Alcona.....	\$1,616 68	\$2,156 96	\$56 87	\$125 00	\$119 25	\$66 45
Alger.....	700 00	1,333 70	1,516 29	-----	109 00	91 50
Allegan.....	9,248 84	10,873 72	1,961 81	1,311 79	256 45	189 50
Alpena.....	2,130 00	8,461 02	2,984 01	-----	262 75	195 00
Antrim.....	23,236 85	24,574 94	1,007 27	24 43	181 81	88 49
Arenac.....	6,235 00	7,961 60	866 42	11 36	57 00	51 90
Baraga.....	360 00	1,511 78	-----	-----	53 00	20 00
Barry.....	14,806 78	15,449 25	876 21	1,073 72	208 51	188 79
Bay.....	32,692 99	42,923 70	956 85	274 62	241 05	304 60
Benzie.....	2,293 00	8,780 76	1,562 45	26 85	84 10	29 10
Berrien.....	14,550 00	22,293 33	4,854 16	1,053 24	226 65	110 51
Branch.....	10,000 00	10,206 11	1,467 61	1,019 24	154 55	262 05
Calhoun.....	31,260 00	31,755 06	951 16	1,996 36	197 20	289 78
Cass.....	2,223 68	8,128 65	1,131 97	797 10	188 00	121 73
Charlevoix.....	16,442 00	18,273 57	854 78	140 96	245 32	96 95
Cheboygan.....	4,842 00	8,126 06	1,481 03	180 29	180 31	112 22
Chippewa.....	10,663 00	11,275 01	428 90	19 50	181 75	116 00
Clare.....	4,707 40	6,668 79	2,341 38	16 00	103 50	26 25
Clinton.....	20,893 00	21,010 92	804 51	776 34	206 00	72 36
Crawford.....	4,921 00	6,243 94	2,249 23	8 51	118 75	51 25
Delta.....	23,464 20	29,531 89	3,478 40	-----	82 00	406 00
Eaton.....	22,233 16	23,856 89	2,062 42	1,767 00	168 04	115 00
Emmet.....	9,475 92	11,366 82	1,866 49	98 20	184 95	64 16
Genesee.....	67,517 57	71,033 22	647 87	1,849 88	153 75	495 19
Gladwin.....	4,000 00	5,168 06	2,296 52	-----	110 75	50 80
Gogebic.....	30,200 00	32,944 00	190 08	-----	119 00	58 50
Grand Traverse.....	19,829 00	20,312 08	1,535 26	1,099 25	120 00	61 80
Gratiot.....	51,027 57	52,074 41	2,125 03	572 55	180 00	180 36
Hilledale.....	16,213 95	20,510 98	750 67	1,283 98	202 21	206 54
Houghton.....	15,000 00	15,807 84	2,526 00	478 50	177 25	182 00

TABLE VIII.—Continued.

Counties.	Bonded indebtedness of the districts.	Total indebtedness of the districts.	Amount due the districts.	Amount received by the districts for non-resident tuition.	Amount paid and due inspectors and members of school boards for services.	Amount paid and due township chairmen and officers for services.
Huron.....	\$13,577 00	\$14,652 09	\$657 58	\$58 20	\$297 10	\$212 65
Ingham.....	58,131 00	58,992 95	1,717 67	1,302 76	140 30	199 01
Ionia.....	12,430 00	14,510 08	849 34	2,558 45	139 25	74 81
Iosco.....	2,450 00	5,445 15	8,084 21	-----	80 00	25 00
Iron.....	9,700 00	9,994 43	1,722 59	-----	310 00	100 00
Isabella.....	16,424 09	18,072 87	5,297 15	149 71	171 75	189 38
Isle Royal.....	-----	-----	-----	-----	-----	-----
Jackson.....	13,570 36	14,777 87	1,020 90	2,538 08	184 30	107 30
Kalamazoo.....	18,533 00	15,851 00	1,477 28	2,164 78	139 23	57 70
Kalkaska.....	6,729 61	7,882 71	759 27	75 12	110 15	50 08
Kent.....	237,371 25	239,152 72	2,976 95	2,860 36	827 75	218 00
Keweenaw.....	-----	-----	448 17	17 84	63 50	6 00
Lake.....	1,973 06	3,435 17	1,215 39	8 56	162 25	85 61
Lapeer.....	27,057 00	27,882 39	981 24	1,114 83	163 00	49 71
Leelanaw.....	785 00	944 79	1,211 01	19 12	87 07	48 62
Lenawee.....	11,555 00	12,443 98	1,290 62	2,462 61	340 65	407 65
Livingston.....	9,685 00	10,185 25	579 38	902 05	137 60	56 20
Luce.....	3,000 00	3,254 00	1,763 62	-----	59 10	22 72
Mackinac.....	18,400 00	19,020 60	4,034 22	-----	126 00	142 40
Macomb.....	4,458 00	5,233 76	187 12	1,164 35	115 25	60 50
Manistee.....	33,095 73	33,878 03	1,158 65	40 93	148 15	58 05
Manitou.....	-----	350 00	1,200 00	2 00	23 00	21 00
Marquette.....	99,400 00	101,909 02	792 84	30 00	192 50	1,065 44
Mason.....	45,820 40	54,004 47	1,312 15	210 50	192 91	297 24
Mecosta.....	5,671 00	6,888 64	2,726 16	31 33	233 20	404 06
Menominee.....	20,508 00	23,877 13	2,182 06	2 50	214 45	545 18
Midland.....	18,527 00	15,698 64	2,937 12	41 22	173 60	77 89
Missaukee.....	3,123 00	5,247 55	2,591 26	10 00	142 25	82 99
Monroe.....	20,056 00	20,683 28	1,456 46	913 32	214 20	92 92
Montcalm.....	13,853 97	14,981 03	6,583 02	621 75	331 37	209 54
Montmorency.....	1,375 00	4,825 65	3,840 11	-----	137 88	79 93
Muskegon.....	34,510 57	37,970 46	2,125 07	462 41	274 21	180 28
Newaygo.....	7,691 05	9,228 93	3,460 64	147 50	388 58	166 19
Oakland.....	30,294 00	31,837 05	1,155 87	2,741 52	262 95	149 50
Oceana.....	3,250 00	5,913 04	2,003 91	204 90	212 68	96 12
Ogemaw.....	6,257 00	8,597 89	2,831 36	8 60	208 52	68 84
Ontonagon.....	1,300 00	1,329 85	875 00	-----	74 08	32 33

TABLE VIII.—Continued.

Counties.	Bonded indebtedness of the districts.	Total indebtedness of the districts.	Amount due the districts.	Amount received by the districts for non-resi- dent tuition.	Amount paid and due in- spectors and members of school boards for services.	Amount paid and due town- ship chairmen and officers for services.
Osceola.....	\$8,668 84	\$9,640 59	\$1,894 59	\$113 78	\$240 00	\$127 75
Oscoda.....	1,271 50	2,774 15	1,741 59	3 65	63 25	14 25
Otsego.....	952 00	2,942 25	1,187 74	22 00	181 45	43 45
Ottawa.....	20,854 00	20,889 69	2,057 58	381 32	209 49	359 99
Presque Isle.....	4,900 00	10,563 67	5,667 89	-----	126 60	182 81
Roscommon.....	858 21	1,299 76	81 57	5 00	87 94	49 94
Saginaw.....	54,199 28	55,450 14	3,773 47	734 45	386 97	2,812 86
St. Clair.....	48,125 00	52,627 83	796 54	648 13	234 48	208 20
St. Joseph.....	8,252 56	9,273 89	255 70	1,912 09	181 28	151 69
Sanilac.....	16,796 00	18,245 29	1,396 53	98 48	230 97	179 12
Schoolcraft.....	1,050 00	1,873 20	469 76	-----	57 50	59 70
Shiawassee.....	18,147 50	19,197 78	705 53	1,237 69	372 00	186 15
Tuscola.....	47,322 40	50,130 93	2,218 16	751 42	260 60	184 10
Van Buren.....	14,983 58	16,554 79	2,353 80	1,584 87	232 50	183 75
Washtenaw.....	43,441 00	44,463 13	760 84	7,054 84	239 65	450 65
Wayne.....	30,296 00	31,187 83	681 03	2,616 70	404 25	8,663 19
Wexford.....	28,054 75	28,080 38	3,504 32	104 01	124 11	242 53

TABLE IX.

Cost per Capita of Public Schools of the State for the School year ending September 2, 1889.

Counties.	No. of scholars included in school census in—		No. of pupils enrolled in—		Cost per capita for instruction, based on school census in—			Cost per capita for instruction, based on enrollment in—			Total expenses per capita during year, based upon enrollment in—		
	Graded school districts.	Ungraded school districts.	Graded school districts.	Ungraded school districts.	Graded school districts.	Ungraded school districts.	All the districts.	Graded school districts.	Ungraded school districts.	All the districts.	Graded school districts.	Ungraded school districts.	All the districts.
Totals.....	329,184	310,885	201,067	222,517	\$5 45	\$4 48	\$4 98	\$8 94	\$6 26	\$7 58	\$16 81	\$8 98	\$12 46
Alcona.....	303	1,189	235	798	\$4 24	\$5 71	\$5 41	\$5 47	\$8 50	\$7 81	\$10 71	\$13 40	\$12 79
Alger.....	61	217	40	187	13 64	14 60	14 39	20 80	16 95	17 62	38 15	31 06	32 81
Allegan.....	3,885	8,748	3,136	6,548	5 42	3 88	4 35	6 72	5 18	5 68	11 16	7 52	8 70
Alpena.....	3,627	1,547	1,614	943	3 93	5 11	4 28	8 41	8 38	8 40	15 11	12 83	14 29
Antrim.....	941	2,165	876	1,551	7 53	6 01	6 47	8 09	8 39	8 28	14 69	12 48	13 23
Arenac.....	665	1,046	479	777	3 64	5 15	4 56	5 05	6 94	6 22	10 47	13 18	12 14
Baraga.....	848	300	552	247	5 35	9 71	6 49	8 22	11 80	9 33	11 60	21 71	14 73
Barry.....	1,624	6,046	1,474	4,884	6 46	4 55	4 96	7 12	5 63	5 98	13 21	7 57	8 88
Bay.....	13,767	4,430	7,547	2,400	4 23	3 13	4 01	7 81	5 87	7 34	15 59	8 75	13 94
Benzie.....	604	1,025	543	851	7 13	7 63	7 44	7 93	9 19	8 70	10 92	13 43	12 45
Berrien.....	5,708	6,911	4,362	5,188	6 14	4 61	5 30	8 03	6 14	7 01	13 26	8 75	10 81
Branch.....	2,583	5,050	2,297	4,009	7 98	4 56	5 72	8 98	5 75	6 92	15 00	7 76	10 40
Calhoun.....	6,863	5,637	4,254	4,414	5 48	5 54	5 51	8 84	7 08	7 94	17 66	9 15	13 33
Cass.....	1,615	4,430	1,392	3,572	7 57	6 04	6 45	8 78	7 49	7 85	12 92	9 55	10 49
Charlevoix.....	1,011	2,124	820	1,580	5 06	5 58	5 42	6 24	7 51	7 07	27 44	11 81	17 15
Cheboygan.....	1,810	1,769	1,082	1,146	4 14	5 39	4 76	6 93	8 32	7 65	10 76	12 85	11 84
Chippewa.....	1,576	1,721	977	1,162	3 77	4 56	4 18	6 07	6 75	6 44	13 36	11 94	12 59
Clare.....	865	1,058	697	785	5 22	6 64	6 00	6 48	8 95	7 79	8 41	17 43	13 18
Clinton.....	2,346	6,187	1,851	4,210	6 42	4 23	4 83	8 14	6 21	6 80	12 65	8 61	9 85
Crawford.....	334	408	243	296	6 06	14 74	10 84	8 33	20 32	14 92	17 56	35 21	27 25
Delta.....	2,684	1,482	1,456	930	3 83	4 85	4 19	7 05	7 74	7 33	18 45	12 61	16 17
Eaton.....	3,484	6,186	3,147	4,917	7 11	4 40	5 38	7 88	5 53	6 45	14 53	7 30	10 12
Emmet.....	1,108	1,403	739	923	5 82	6 25	6 06	8 72	9 50	9 15	11 71	15 69	13 92
Genesee.....	4,525	7,030	3,579	5,310	6 83	4 35	5 32	8 63	5 76	6 91	13 92	7 82	11 48
Gladwin.....	.....	899	.....	717	.....	6 27	6 27	.....	7 86	7 86	.....	14 97	14 97
Gogebio.....	1,630	342	1,234	199	6 33	9 40	6 87	8 04	16 16	9 13	24 47	33 11	25 63
Gd. Traverse....	1,508	2,408	1,177	1,740	6 85	5 46	6 04	8 91	7 56	8 10	20 93	11 16	15 10
Gratiot.....	2,489	6,871	2,147	5,268	6 52	3 57	4 35	7 56	4 66	5 50	14 11	7 20	9 20
Hillsdale.....	2,763	5,904	2,223	4,844	6 71	4 91	5 48	8 34	5 99	6 73	14 46	8 02	10 05
Houghton.....	10,280	813	6,152	400	5 98	3 68	5 81	9 99	7 48	9 84	18 37	13 80	18 09

COST PER CAPITA OF PUBLIC SCHOOLS.

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TABLE IX.—Continued.

Counties.	No. of scholars included in school census in—		No. of pupils enrolled in—		Cost per capita for instruction, based on school census in—			Cost per capita for instruction, based on enrollment in—			Total expenses per capita during year, based upon enrollment in—		
	Graded school districts.	Ungraded school districts.	Graded school districts.	Ungraded school districts.	Graded school districts.	Ungraded school districts.	All the districts.	Graded school districts.	Ungraded school districts.	All the districts.	Graded school districts.	Ungraded school districts.	All the districts.
Huron.....	2,774	7,967	1,844	4,589	\$ 4 23	\$ 3 01	\$3 32	\$5 37	\$5 28	\$5 59	\$8 48	\$8 08	\$8 20
Ingham.....	5,447	5,194	4,249	4,072	6 25	4 66	5 48	8 02	5 95	7 00	15 58	8 63	12 18
Ionia.....	3,419	6,381	2,837	4,671	7 67	4 41	5 55	9 25	6 03	7 24	16 60	7 40	10 87
Iosco.....	3,426	767	1,308	842	2 99	7 98	3 81	7 84	7 23	7 60	18 15	9 90	11 88
Iron.....	733	303	606	153	6 62	7 11	6 76	8 00	14 08	9 23	12 86	32 24	16 76
Isabella.....	1,001	5,254	789	3,820	5 36	4 10	4 31	6 80	5 65	5 84	9 65	7 80	8 11
Ile Royal.....													
Jackson.....	6,808	5,866	4,745	4,493	6 74	5 18	5 99	9 67	6 69	8 22	14 07	9 21	11 70
Kalamazoo.....	6,785	4,726	4,351	3,545	5 64	5 52	5 59	8 80	7 36	8 16	13 84	9 92	12 06
Kalkaska.....	349	1,193	335	985	7 02	8 31	8 02	7 31	10 07	9 37	15 17	16 61	16 25
Kent.....	20,568	9,938	14,068	7,105	6 76	4 38	5 99	9 89	6 12	8 63	18 53	8 80	15 26
Keweenaw.....	645	307	385	240	4 48	11 39	6 71	7 51	14 57	10 22	11 53	18 66	14 27
Lake.....	978	1,081	752	831	6 04	7 16	6 62	7 85	9 31	8 62	11 58	13 76	12 72
Lapeer.....	3,274	6,817	2,633	5,073	6 00	4 06	4 69	7 46	5 45	6 14	12 97	7 89	9 62
Leelanaw.....	401	2,232	258	1,519	3 82	4 06	4 02	5 93	6 09	6 07	7 26	7 77	7 70
Lenawee.....	5,621	3,361	4,066	6,230	6 72	4 62	5 46	9 29	6 20	7 42	13 44	8 47	10 44
Livingston.....	1,556	4,795	1,859	3,777	7 47	4 75	5 42	8 55	6 08	6 70	16 93	7 67	10 12
Luce.....	288	155	208	132	5 73	9 81	7 16	7 98	11 52	9 32	12 61	13 24	12 85
Mackinac.....	972	810	567	587	5 05	6 19	5 57	8 67	8 54	8 60	40 76	12 97	26 63
Macomb.....	3,341	6,861	2,607	3,658	4 94	3 32	3 90	7 28	6 22	6 66	12 11	8 04	9 74
Manistee.....	4,895	2,363	2,783	1,454	5 04	4 78	4 95	8 86	7 77	8 48	15 51	12 30	14 41
Manitou.....		351		186		2 02	2 02		3 81	3 81		4 89	4 89
Marquette.....	9,688	1,220	5,840	800	5 33	7 53	5 59	8 84	11 48	9 16	16 70	18 42	16 91
Mason.....	2,750	2,244	2,084	1,634	6 16	5 51	5 87	8 13	7 57	7 88	25 14	10 92	18 89
Mecosta.....	2,568	4,329	2,049	3,210	5 91	4 64	5 11	7 40	6 26	6 70	13 17	9 36	10 84
Menominee.....	5,399	2,083	3,605	1,283	5 56	5 36	5 50	8 33	8 49	8 37	19 11	12 99	17 51
Midland.....	1,013	2,497	656	1,792	6 63	5 17	5 59	10 24	7 20	8 02	18 66	11 19	13 20
Missaukee.....	270	1,015	197	786	5 65	8 66	8 03	7 75	11 19	10 50	12 34	19 01	17 68
Monroe.....	2,810	3,737	1,211	5,879	3 52	3 24	3 31	8 17	4 82	5 39	13 86	6 48	7 74
Montcalm.....	3,558	7,085	2,832	5,248	6 83	3 78	4 80	8 58	5 07	6 30	12 93	7 35	9 31
Montmorency.....	96	300	64	225	5 81	10 38	9 73	6 64	14 64	12 47	4 78	21 14	16 69
Muskegon.....	10,167	3,311	6,504	2,647	5 62	4 23	5 24	8 78	6 09	8 00	16 49	9 03	14 33
Nawaygo.....	1,323	4,707	1,026	3,569	5 28	4 69	4 82	6 83	6 18	6 32	10 47	9 59	9 79
Oakland.....	4,221	6,786	3,723	5,234	7 50	5 45	6 24	8 51	7 07	7 67	13 75	9 25	11 12
Oceana.....	1,181	3,843	998	2,871	5 40	4 62	4 81	6 89	6 19	6 24	8 26	9 08	8 88
Ogemaw.....	395	1,003	340	777	4 87	7 83	6 85	5 07	10 10	8 57	7 87	18 92	12 07

TABLE IX.—*Continued.*

Counties.	No. of scholars included in school census in—		No. of pupils enrolled in—		Cost per capita for instruction, based on school census in—			Cost per capita for instruction, based on enrollment in—			Total expenses per capita during year, based upon enrollment in—		
	Graded school districts.	Ungraded school districts.	Graded school districts.	Ungraded school districts.	Graded school districts.	Ungraded school districts.	All the districts.	Graded school districts.	Ungraded school districts.	All the districts.	Graded school districts.	Ungraded school districts.	All the districts.
Ontonagon.....	711	196	367	104	\$9 92	\$10 88	\$10 12	\$19 21	\$20 50	\$19 50	\$27 26	\$41 85	\$30 48
Osceola.....	1,596	3,511	1,389	2,408	5 87	4 65	5 03	6 74	6 78	6 77	6 81	11 18	10 31
Oscoda.....	.....	451	.....	324	.....	7 36	7 36	.....	10 24	10 24	.....	18 98	18 98
Otsego.....	178	1,079	140	760	6 21	8 14	7 87	7 89	11 56	10 99	10 51	16 63	14 68
Ottawa.....	6,278	6,610	4,497	4,497	4 59	3 56	4 06	6 40	5 24	5 82	9 43	7 09	8 26
Presque Isle...	268	1,383	225	720	3 96	3 06	3 18	4 63	5 82	5 54	10 13	9 48	9 63
Roscommon ...	337	168	223	145	5 22	13 43	7 95	7 89	15 56	10 91	9 50	27 63	16 64
Saginaw.....	18,120	9,596	9,430	5,876	4 80	3 57	4 38	9 23	5 83	7 93	18 10	8 57	14 76
St. Clair.....	8,010	9,468	4,758	6,350	4 15	3 18	3 63	6 99	4 74	5 70	15 18	6 60	10 35
St. Joseph.....	2,951	4,352	2,630	3,472	8 39	5 16	6 47	9 42	6 47	7 74	14 81	8 83	11 41
Sanilac.....	2,578	9,419	1,872	6,756	4 06	3 09	3 30	5 58	4 31	4 59	10 48	6 52	7 38
Schoolcraft....	319	474	440	361	11 29	9 75	10 37	8 18	12 60	10 27	11 69	19 21	15 08
Shiawassee	3,386	5,766	2,953	4,166	7 50	4 15	5 88	8 59	5 74	6 91	15 68	7 46	10 85
Tuscola.....	2,955	7,829	2,463	5,508	5 41	3 50	4 02	6 49	4 97	5 44	12 23	6 94	8 58
Van Buren.....	3,147	6,098	2,969	4,315	7 16	4 88	5 65	7 59	6 17	6 71	11 07	8 29	9 35
Washtenaw....	6,595	6,282	4,376	4,524	7 69	5 14	6 45	11 60	7 18	9 33	22 41	9 45	15 82
Wayne.....	69,538	9,690	22,768	5,686	4 24	3 26	4 12	13 96	5 56	11 48	28 01	8 28	20 07
Wexford.....	1,495	1,746	1,233	1,382	7 46	7 32	7 38	9 05	9 25	9 15	20 06	14 64	17 19

TABLE X.

Statistics of Township Libraries as reported by School Inspectors for the Year ending September 2, 1889.

Counties.	No. of townships using library mon- eys for general school purposes.	No. of townships forfeiting library money.	No. of townships maintaining libra- ries.	No. of volumes added to town- ship libraries dur- ing year.	Whole No. of vol- umes in township libraries.	Amount paid for books and care of township libraries.	Amount of taxes voted for town- ship libraries.	Amount of fines, etc., received from county treasurers for township li- braries.
Totals.....	481	247	505	10,541	142,101	\$14,876 04	\$4,700 97	\$28,303 75
Alcona.....	8	2	3	26	747	\$90 00	.....	\$56 03
Alger.....	3	1	2	.....	333	.....	.....	.....
Allegan.....	12	4	10	417	2,872	384 65	\$18 00	333 99
Alpena.....	1	3	3	.....	221	5 00	.....	.....
Antrim.....	2	1	12	247	2,483	235 03	35 00	163 04
Arenac.....	6	5	.....	.....	.....	.....	.....	.....
Baraga.....	2	1	2	50	487	75 00	75 00	.....
Barry.....	9	4	3	25	608	85 70	.....	228 80
Bay.....	5	.....	10	68	2,755	271 31	50 00	140 33
Benzie.....	1	1	11	103	1,560	129 73	.....	31 51
Berrien.....	8	2	10	844	5,482	941 25	350 00	1,087 69
Branch.....	11	3	4	128	1,639	319 86	50 00	129 62
Calhoun.....	18	1	1	21	229	23 95	.....	137 63
Cass.....	9	1	5	17	2,066	21 16	.....	36 26
Charlevoix.....	3	8	6	36	1,598	142 23	276 68	37 78
Cheboygan.....	8	.....	5	65	869	104 18	.....	54 18
Chippewa.....	3	2	4	145	884	273 56	.....	1,367 16
Clare.....	2	3	6	11	467	91 75	.....	24 01
Clinton.....	11	3	3	1	569	17 00	.....	133 56
Crawford.....	1	1	7	238	1,580	344 49	185 00	54 85
Delta.....	3	4	4	60	329	63 54	.....	124 06
Eaton.....	7	.....	8	517	3,914	534 76	366 81	229 30
Emmet.....	1	4	7	118	1,193	300 57	314 10	175 71
Genesee.....	17	1	1	75	461	10 00	.....	171 01
Gladwin.....	1	5	2	.....	300	26 50	22 68	.....
Gogebic.....	1	5	.....	.....	.....	.....	.....	.....
Grand Traverse.....	.....	.....	18	107	3,817	170 41	11 50	101 98

TABLE X.—Continued.

Counties.	No. of townships using library mon- eys for general school purposes.	No. of townships forfeiting library moneys.	No. of townships maintaining libra- ries.	No. of volumes added to town- ship libraries dur- ing year	Whole No. of vol- umes in township libraries.	Amount paid for books and care of township libraries.	Amount of taxes voted for town- ship libraries.	Amount of fines, etc., received from county treasurers for township li- braries.
Gratiot.....	10	7	.....	.....	.....	.....	.....	\$54 98
Hillsdale.....	17	.....	2	16	420	.....	\$17 97	89 10
Houghton.....	4	8	4	371	3,286	\$610 49	.....	452 25
Huron.....	9	7	11	83	1,565	67 53	100 00	147 70
Ingham.....	14	2	1	.....	155	37 15	.....	.....
Ionia.....	11	5	3	.....	200	.....	.....	37 69
Iosco.....	.....	7	5	79	1,187	153 83	85 00	159 39
Iron.....	1	5	.....	.....	.....	.....	.....	.....
Isabella.....	4	4	8	35	1,114	49 99	.....	42 39
Isle Royal.....	.....	.....	.....	.....	.....	.....	.....	.....
Jackson.....	16	2	1	44	835	19 69	.....	77 38
Kalamazoo.....	13	.....	4	55	1,245	108 88	.....	49 34
Kalkaska.....	3	5	5	31	250	15 00	.....	51 50
Kent.....	12	2	11	641	4,164	610 50	75 00	307 31
Keweenaw.....	1	2	5	57	2,300	107 70	88 00	48 75
Lake.....	3	3	8	72	1,356	141 25	.....	86 56
Lapeer.....	11	4	4	161	817	106 44	.....	75 51
Leelanaw.....	.....	1	10	20	1,690	107 70	.....	69 30
Lenawee.....	8	8	6	63	5,450	149 10	.....	120 17
Livingston.....	11	2	4	105	1,425	135 41	.....	14 71
Luce.....	.....	3	.....	.....	.....	.....	.....	.....
Mackinac.....	3	3	5	231	1,116	292 71	.....	105 44
Macomb.....	4	7	4	1	1,040	33 49	.....	26 26
Manistee.....	1	2	9	331	2,050	389 29	.....	118 27
Manitou.....	2	1	1	1	54	5 00	.....	.....
Marquette.....	3	4	6	240	1,990	359 44	.....	114 85
Mason.....	1	2	11	134	2,590	335 32	55 90	331 21
Mecosta.....	4	8	10	235	2,104	269 29	.....	293 87
Menominee.....	2	3	5	.....	3,444	172 95	450 00	28 49
Midland.....	2	6	7	12	393	21 25	.....	.....
Missaukee.....	2	3	9	28	928	90 12	25 00	67 11
Monroe.....	5	.....	11	16	2,760	83 52	.....	36 76
Montcalm.....	9	1	12	86	2,035	207 86	.....	108 99
Montmorency.....	.....	4	2	5	285	28 00	50 00	.....
Muskegon.....	2	.....	15	446	4,399	740 74	250 00	97 53
Newaygo.....	3	4	15	126	3,054	183 21	25 00	59 81

STATISTICS OF TOWNSHIP LIBRARIES.

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TABLE X.—Continued.

Counties.	No. of townships using library mon- ey for general school purposes.	No. of townships forfeiting library moneys.	No. of townships maintaining libra- ries.	No. of volumes added to town- ship libraries dur- ing year.	Whole No. of vol- umes in township libraries.	Amount paid for books and care of township libraries.	Amount of taxes voted for town- ship libraries.	Amount of fines, etc., received from county treasurers for township li- braries.
Oakland	17	4	5	114	2,523	\$148 18	.....	\$75 23
Oceana .....	.....	1	16	198	3,570	403 33	\$225 00	180 66
Ogemaw	5	5	6	252	1,229	434 69	.....	326 10
Ontonagon	1	3	2	.....	1,120	.....	.....	.....
Osceola	5	.....	12	370	2,650	477 85	.....	162 10
Oscoda	5	3	1	22	394	50 60	50 00	.....
Otsego	4	1	7	142	1,883	332 26	121 33	52 29
Ottawa	4	.....	11	300	3,932	364 57	70 00	131 06
Presque Isle	3	5	2	9	208	6 12	.....	.....
Roscommon	3	2	4	72	432	105 00	63 00	76 36
Saginaw	10	7	11	379	4,604	262 18	50 00	58 60
St. Clair	8	7	8	198	2,540	239 21	.....	114 53
St. Joseph	12	3	2	570	4,987	1,099 43	925 00	76 94
Sanilac	11	5	11	92	1,258	121 82	.....	70 30
Schoolcraft	3	2	2	.....	644	343 80	.....	.....
Shiawassee	10	5	2	48	1,060	84 37	6 00	28 97
Tuscola	11	3	12	132	2,880	174 82	.....	58 16
Van Buren	12	.....	7	221	3,918	435 46	220 00	95 72
Washtenaw	12	4	7	75	2,952	45 00	.....	131 43
Wayne	7	7	6	185	3,772	246 22	.....	515 86
Wexford .....	.....	.....	15	158	2,446	206 62	45 00	60 27

TABLE XI.

Statistics of District Libraries as Reported by School Inspectors for the year ending September 2, 1889.

Counties.	No. of districts of less than 100 children reporting libraries.	No. of volumes reported in such libraries.	No. of districts of 100 or more children maintaining libraries.	No. of volumes added to last mentioned libraries during the year.	Whole No. of volumes in such libraries.	Amount paid for support of such libraries.	Amount of fines, etc., received from county treasurer for such libraries.
Totals.....	788	46,648	319	21,126	275,838	\$69,502 45	\$19,378 55
Alcona.....							
Alger.....							
Allegan.....	41	1,701	16	391	2,159	\$252 77	\$171 06
Alpena.....			3	106	2,430	833 04	73 06
Antrim.....	1	20	2	12	182		
Arenac.....	3	128	1		115	8 00	
Baraga.....	1	228	2	62	470	75 00	
Barry.....	8	199	2	119	1,665	170 02	215 31
Bay.....			5	754	15,531	232 97	28 75
Benzie.....			1	2	592		
Berrien.....	16	423	9	431	2,405	525 65	414 28
Branch.....	23	1,088	3		287		8 34
Calhoun.....	39	1,558	4	841	10,807	1,840 58	1,785 00
Cass.....	32	1,326	4	15	1,115	27 83	26 62
Charlevoix.....			1		17		9 70
Cheboygan.....	1	70	1	25	494	80 70	337 97
Chippewa.....			1	100	463	140 56	766 74
Clare.....							
Clinton.....	5	95	6	83	374	156 76	114 83
Crawford.....	2	14					
Delta.....			3	400	1,353	488 64	98 40
Eaton.....			2	245	648	102 95	156 45
Emmet.....	4	57	1	5	5		
Genesee.....	22	792	4	520	7,241	961 18	1,431 02
Gladwin.....	1	67	1	200	300		
Gogebic.....	1	70	1	175	200	142 75	582 82
Grand Traverse.....	1	16	2	150	378	450 00	42 42
Gratiot.....	8	277	5	153	1,553	188 75	69 79
Hillsdale.....	30	774	4	198	828	194 08	122 39

STATISTICS OF DISTRICT LIBRARIES.

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TABLE XI.—Continued.

Counties.	No. of districts of less than 100 children reporting libraries.	No. of volumes reported in such libraries.	No. of districts of 100 or more children maintaining libraries.	No. of volumes added to last mentioned libraries during the year.	Whole No. of volumes in such libraries.	Amount paid for support of such libraries.	Amount of fines, etc., received from county treasurer for such libraries.
Houghton.....			7	287	3,477	\$484 24	\$337 40
Huron.....	2	28	9		965	42 00	28 29
Ingham.....	10	460	4	312	6,335	1,029 66	225 91
Ionia.....	3	98	7	129	1,062	109 22	134 17
Iosco.....			1	60	600	60 45	187 66
Iron.....	1	11	1	140	343	179 40	
Isabella.....	5	246	2	155	454		1 12
Isle Royal.....							
Jackson.....	80	1,499	8	216	2,363	170 61	170 13
Kalamazoo.....	46	2,928	5	1,168	16,627	2,220 69	1,060 10
Kalkaska.....	8	289	1		232	27 50	5 50
Kent.....	18	735	8	786	25,684	6,801 86	4,628 59
Keweenaw.....	4	2,020					
Lake.....	2	64	1	80	147		
Lapeer.....	18	605	8	221	1,531	76 33	98 35
Leelanaw.....	1	26	1	12	111		
Lenawee.....	61	3,188	13	345	8,864	752 44	790 60
Livingston.....	7	199	1		35		
Luce.....	1	7	1	2	13		
Mackinac.....			2		730	15 75	165 57
Macomb.....	9	222	13	65	2,996	190 10	160 63
Manistee.....	8	369	4	352	1,538	690 86	274 86
Manitou.....			1	1	51		
Marquette.....			4	1,133	6,734	1,890 23	511 71
Mason.....			1	200	2,200	386 67	228 97
Mecosta.....	9	348	2		1,830	56 00	371 38
Menominee.....	3	297	3	622	1,328	914 70	792 07
Midland.....	8	793	4		1,121	5 00	94 60
Missaukee.....	4	97					
Monroe.....	3	51	4	94	2,723	313 19	300 45
Montcalm.....	5	146	6	101	1,011	194 00	23 06
Montmorency.....	1	30					
Muskegon.....			3	562	5,521	1,684 95	101 50
Newaygo.....	4	280	2	12	69	50 00	
Oakland.....	26	1,463	4	72	1,901		9 39

TABLE XI.—*Continued.*

Counties.	No. of districts of less than 100 children reporting libraries.	No. of volumes reported in such libraries.	No. of districts of 100 or more children maintaining libraries.	No. of volumes added to last mentioned libraries during the year.	Whole No. of volumes in such libraries.	Amount paid for support of such libraries.	Amount of fines, etc., received from county treasurer for such libraries.
Oceana.....	5	312					
Ogemaw.....							
Ontonagon.....	8	289	8		1,663		
Osceola.....			2	88	477	\$20 00	\$25 55
Oscoda.....							
Otsego.....	1	94					
Ottawa.....	15	946	13	348	4,080	560 62	184 92
Presque Isle.....	11	560	1	35	126	30 50	119 44
Roscommon.....							
Saginaw.....	30	1,523	13	1,059	14,810	1,904 92	446 90
St. Clair.....	21	801	9	425	2,756	494 34	517 79
St. Joseph.....	45	2,102	6	17	1,365	87 50	29 86
Sanilac.....	7	287	7	8	323	6 80	17 88
Schoolcraft.....							
Shiawassee.....	9	196	4	95	533	50 05	21 08
Tuscola.....	8	880	7	257	1,149	138 42	28 99
Van Buren.....	14	411	6	74	508	74 00	107 54
Washtenaw.....	8	178	4	47	1,180	86 15	26 39
Wayne.....	73	12,218	23	5,822	96,143	31,216 99	885 20
Wexford.....			1	138	568	169 18	65 67

TABLE XII.

Branches of Instruction as Reported by School Inspectors for the year ending September 2, 1889.

Counties.	Number of districts in which instruction is given in												
	Orthography.	Reading.	Writing.	Arithmetic.	Geography.	English Grammar.	U. S. History.	Civil Government.	Algebra.	Geometry.	Physiology.	Natural Philosophy.	Botany.
Totals	7,050	7,050	7,050	7,050	7,050	6,319	5,971	3,795	1,716	523	5,321	654	410
Alcona	25	25	25	25	25	23	21	11	3	1	17	1	1
Alger	10	10	10	10	10	8	9	3	1	1	9	-----	-----
Allegan	186	186	186	186	186	167	159	99	34	9	127	9	6
Alpena	21	21	21	21	21	20	15	14	3	1	15	4	2
Antrim	70	70	70	70	70	64	61	42	10	4	55	8	2
Arenac	28	28	28	28	28	27	26	20	1	-----	26	1	-----
Baraga	11	11	11	11	11	10	9	4	3	2	7	-----	2
Barry	147	147	147	147	147	140	116	97	48	8	109	9	8
Bay	53	53	53	53	53	47	47	25	7	2	48	4	2
Benzie	43	43	43	43	43	38	37	19	5	2	37	3	1
Berrien	149	149	149	149	149	135	126	75	42	31	103	14	5
Branch	130	130	130	130	130	123	117	57	38	4	110	9	4
Calhoun	161	161	161	161	161	157	141	94	73	11	135	15	13
Cass	115	115	115	115	115	113	113	75	40	5	107	11	5
Charlevoix	67	67	67	67	67	65	64	43	8	4	60	7	4
Cheboygan	48	48	48	48	48	33	35	15	6	3	36	3	3
Chippewa	38	38	38	38	38	33	30	20	-----	-----	30	-----	-----
Clare	35	35	35	35	35	28	29	13	4	2	26	5	2
Clinton	129	129	129	129	129	124	121	86	34	7	111	20	5
Crawford	37	37	37	37	37	31	26	17	7	1	30	2	-----
Delta	33	33	33	33	33	25	22	11	4	2	15	2	2
Eaton	147	147	147	147	147	140	131	76	25	5	97	10	4
Emmet	58	58	58	58	58	51	54	31	5	2	44	2	2
Genesee	159	159	159	159	159	154	151	98	54	6	126	8	2
Gladwin	23	22	22	22	22	22	20	14	5	3	20	4	-----
Gogebic	8	8	8	8	8	8	7	5	4	3	7	3	2
Grand Traverse	64	64	64	64	64	57	52	28	8	3	58	2	1
Gratiot	129	129	129	129	129	118	119	65	27	11	103	11	6

TABLE XII.—Continued.

Counties.	Number of districts in which instruction is given in												
	Orthography.	Reading.	Writing.	Arithmetic.	Geography.	English Grammar.	U. S. History.	Civil Government.	Algebra.	Geometry.	Physiology.	Natural Philosophy.	Botany.
Hillsdale.....	167	167	167	167	167	158	142	83	77	12	139	24	6
Houghton.....	19	19	19	19	19	17	15	9	10	6	13	7	6
Huron.....	108	108	108	108	108	108	100	69	19	8	88	17	10
Ingham.....	135	135	135	135	135	124	17	78	35	11	93	9	4
Ionia.....	140	140	140	140	140	118	121	74	30	5	83	9	9
Iosco.....	23	23	23	23	23	21	16	13	4	4	21	4	2
Iron.....	8	8	8	8	8	7	7	2	3	-----	8	1	-----
Isabella.....	100	100	100	100	100	96	89	61	11	1	85	5	2
Isle Royal.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Jackson.....	155	155	155	155	155	142	131	94	74	22	27	19	13
Kalamazoo.....	138	138	138	138	138	131	125	77	51	14	99	9	4
Kalkaska.....	53	53	53	53	53	43	40	14	5	1	45	4	1
Kent.....	215	215	215	215	215	112	195	117	63	18	168	32	10
Keweenaw.....	9	9	9	9	9	9	7	7	5	1	8	2	-----
Lake.....	47	47	47	47	47	38	41	27	8	4	41	4	2
Lapeer.....	138	138	138	138	138	138	125	87	30	10	112	13	8
Leelanaw.....	53	53	53	53	53	48	46	26	4	1	50	2	1
Lenawee.....	199	199	199	199	199	189	185	107	56	15	147	19	9
Livingston.....	134	134	134	134	134	127	121	96	59	16	109	6	6
Luce.....	7	7	7	7	7	5	5	2	1	-----	6	-----	-----
Mackinac.....	30	30	30	30	30	23	19	9	2	1	18	2	1
Macomb.....	117	117	117	117	117	105	100	72	32	17	87	10	9
Manistee.....	52	52	52	52	52	49	52	37	5	1	43	3	-----
Manitou.....	4	4	4	4	4	4	4	4	-----	-----	-----	4	-----
Marquette.....	34	34	34	34	34	32	29	13	8	4	32	5	4
Mason.....	55	55	55	55	55	53	43	23	3	3	46	2	2
Mecosta.....	99	99	99	99	99	79	72	45	8	6	77	12	6
Menominee.....	43	43	43	43	43	38	30	11	4	2	31	2	1
Midland.....	59	59	59	59	59	57	51	33	8	2	52	9	2
Missaukee.....	44	44	44	44	44	34	30	15	8	-----	31	1	-----
Monroe.....	137	137	137	137	137	129	129	72	29	11	77	8	5
Montcalm.....	135	135	135	135	135	116	113	73	40	21	100	11	8
Montmorency.....	21	21	21	21	21	20	20	12	-----	-----	17	1	-----
Muskegon.....	88	88	88	88	88	78	75	33	14	5	71	6	4
Newaygo.....	106	106	106	106	106	95	94	62	24	8	94	5	3
Oakland.....	214	214	214	214	214	181	166	112	69	19	124	29	11

TABLE XII.—Continued.

Counties.	Number of districts in which instruction is given in												
	Orthography.	Reading.	Writing.	Arithmetic.	Geography.	English Grammar.	U. S. History.	Civil Govern-ment.	Algebra.	Geometry.	Physiology.	Natural Philosophy.	Botany.
Oceana	84	84	84	84	84	81	78	49	14	13	82	16	8
Ogemaw	40	40	40	40	40	85	38	28	8	1	34	5	2
Ontonagon	10	10	10	10	10	9	9	7	4	2	7	3	1
Osceola	88	88	88	88	88	78	76	40	12	5	74	5	4
Oscoda	24	24	24	24	24	18	17	8	1	.....	15	2	.....
Otsego	40	40	40	40	40	85	87	26	8	2	38	4	1
Ottawa	121	121	121	121	121	117	116	65	20	5	106	18	7
Presque Isle	30	30	30	30	30	22	20	17	2	1	23	1	.....
Roscommon	16	16	16	16	16	15	14	8	8	.....	48	2	.....
Saginaw	151	151	151	151	151	129	143	94	33	8	128	17	81
St. Clair	155	155	155	155	155	148	148	103	29	12	113	18	7
St. Joseph	125	125	125	125	125	99	95	55	33	7	77	9	7
Sanilac	134	134	134	134	134	123	117	101	57	18	110	18	5
Schoolcraft	17	17	17	17	17	16	12	9	5	.....	15	1	.....
Shiawassee	122	122	122	122	122	94	90	34	23	11	73	14	9
Tuscola	144	144	144	144	144	132	118	73	35	12	117	10	9
Van Buren	154	154	154	154	154	146	136	80	33	19	125	16	13
Washtenaw	163	163	163	163	163	144	115	65	51	11	107	14	8
Wayne	151	151	151	151	151	144	136	87	42	10	91	17	10
Wexford	67	67	67	67	67	56	45	25	5	4	60	6	5

TABLE XIII.—*Private and Select Schools as reported for the Year ending September 2, 1889.*

• Counties.	Private and Select Schools.			
	No. of Schools.	No. of Teachers.		Estimated number of Pupils.
		Men.	Women.	
Totals.....	812	277	422	34,179
Alcona.....				
Alger.....				
Allegan.....	4	3	2	275
Alpena.....				
Antrim.....				
Arenac.....				
Baraga.....				
Barry.....				
Bay.....	16	16	14	2,184
Benzie.....				
Berrien.....	4	1	4	180
Branch.....	2	4		55
Calhoun.....	7	10	15	870
Cass.....	1		1	20
Charlevoix.....				
Cheboygan.....	2	1	5	400
Chippewa.....				
Clare.....	1		1	15
Clinton.....				
Crawford.....				
Delta.....	1		8	650
Eaton.....	1		1	15
Emmet.....	2	1	3	72
Genesee.....	5	5	12	331
Gladwin.....				
Gogebic.....				
Grand Traverse.....				
Gratiot.....				
Hillsdale.....	3	1	2	38
Houghton.....	6	5	13	1,108
Huron.....	15	9	6	944

Counties.	Private and Select Schools.			
	No. of Schools.	No. of Teachers.		Estimated number of Pupils.
		Men.	Women.	
Ingham.....	5	5	4	350
Ionia.....	4	2	8	299
Iosco.....				
Iron.....				
Isabella.....	2	2		90
Isle Royal.....				
Jackson.....	6	3	4	220
Kalamazoo.....	5	8	12	410
Kalkaska.....				
Kent.....	22	20	31	2,205
Keweenaw.....				
Lake.....				
Lapeer.....				
Leelanaw.....	1	1		40
Lenawee.....	10	9	7	765
Livingston.....	2		2	31
Luce.....				
Mackinac.....	1		1	20
Macomb.....	16	14	8	1,285
Manistee.....	4	3	10	800
Manitou.....				
Marquette.....	5	1	17	1,055
Mason.....				
Mecosta.....	5	6	3	310
Menominee.....	5	2	10	462
Midland.....	1		1	12
Missaukee.....				
Monroe.....	6	5	3	314
Montcalm.....				
Montmorency.....				
Muskegon.....	6	6	11	940
Newaygo.....				
Oakland.....				

TABLE XIII.—Continued.

Counties.	Private and Select Schools.				Counties.	Private and Select Schools.			
	No. of Schools.	No. of Teachers.		Estimated number of Pupls.		No. of Schools.	No. of Teachers.		Estimated number of Pupls.
		Men.	Women.				Men.	Women.	
Oceana.....	2	1	1	50	St. Clair.....	15	10	21	1,225
Ogemaw.....					St. Joseph.....	3	5	3	110
Ontonagon.....					Sanilac.....	2	1	1	60
Osceola.....	2	1	1	70	Schoolcraft.....				
Oscoda.....	1		1	4	Shiawassee.....	2	2	2	125
Otsego.....					Tuscola.....	5	4	1	115
Ottawa.....	4	3	3	155	Van Buren.....				
Presque Isle.....	2	2		100	Washtenaw.....	12	13	12	790
Roscommon.....					Wayne.....	69	98	179	13,169
Saginaw.....	17	12	10	1,441	Wexford.....				

TABLE XIV.

Examination and Certification of Teachers as reported by Secretaries of County Boards of School Examiners for the Year ending September 2, 1889.

Counties.	No. of public examinations.	Whole No. of applicants for regular certificates.	Whole No. of applicants for special certificates.	Number of applicants receiving certificates.				No. licensed without experience in teaching.	No. of applicants having received some Normal instruction.	No. of applicants having attended institutes during the year.	No. of teachers holding State certificates.	No. of teachers holding State Normal School certificates.	No. of legally qualified teachers in the county.	No. making teaching a permanent occupation.	No. of teachers' certificates suspended.	No. of teachers' certificates revoked.
				First.	Second.	Third.	Special.									
Totals.....	489	15,979	1,368	206	554	10,361	1,143	2,399	2,216	5,034	71	822	11,581	4,629	14	9
Alcona.....	4	48	15	2	....	25	12	9	1	15	....	1	31	31	....	....
Alger.....	4	14	7	....	3	8	7	1	3	1	....	....	12	3	1	....
Allegan.....	8	378	21	7	31	245	19	48	59	105	7	7	333	....	....	....
Alpena.....	2	68	15	1	2	41	14	9	....	31	....	....	39	4	....	....
Antrim.....	5	134	10	1	....	64	10	10	....	56	1	6	77	50	....	....
Arenac.....	8	65	4	2	4	43	4	12	9	38	....	1	55	6	....	....
Baraga.....	4	25	3	4	1	20	3	2	7	2	1	....	27	24	....	....
Barry.....	6	376	35	5	14	206	35	57	....	93	....	3	246	80	....	....
Bay.....	4	125	16	2	5	61	11	8	19	29	....	1	78	53	....	....
Benzie.....	5	87	6	3	4	59	6	9	6	34	....	....	70	64	....	....
Berrien.....	8	399	16	4	8	260	16	46	120	200	7	3	275	120	....	....
Branch.....	7	345	19	6	15	182	12	41	83	90	2	4	212	141	2	....
Calhoun.....	8	370	4	9	16	212	4	54	20	124	....	3	244	92	1	....
Cass.....	8	485	12	3	7	196	12	50	75	67	....	10	216	80	....	....
Charlevoix...	6	158	16	4	7	87	15	26	11	32	1	1	99	90	....	....
Cheboygan...	5	93	15	2	4	39	10	5	5	29	....	1	48	12	....	....
Chippewa.....	5	91	13	....	3	43	13	5	2	22	....	2	46	33	....	....
Clare.....	7	79	36	....	....	43	21	15	9	15	....	....	45	20	....	....
Clinton.....	8	220	....	1	7	159	54	37	7	60	....	6	189	....	....	....
Crawford.....	4	41	8	....	3	33	8	10	3	20	....	....	39	39	....	....
Delta.....	3	88	8	1	5	31	6	6	....	14	....	1	50	23	....	....
Eaton.....	6	453	20	4	10	212	13	51	10	91	....	1	237	105	5	....
Emmet.....	6	114	30	2	2	78	20	9	11	38	....	2	73	65	....	....
Genesee.....	7	407	4	4	11	237	....	64	189	107	....	1	253	103	....	....
Gladwin.....	4	31	10	....	....	20	6	3	....	9	....	....	20	5	....	....
Gogebic.....	3	18	8	1	1	13	8	5	2	3	....	....	....	....	....	....
G. Traverse..	8	122	11	1	5	91	8	27	13	50	....	8	103	56	....	....
Gratiot.....	7	258	91	8	10	188	36	63	76	133	2	8	261	71	2	....

TABLE XIV.—Continued.

Counties.	No. of public examina- tions.	Whole No. of appli- cants for regular cer- tificates.	Whole No. of appli- cants for special cer- tificates.	Number of applicants receiving certificates.				No. licensed without experience in teach- ing.	No. of applicants hav- ing received some Normal instruction.	No. of applicants hav- ing attended insti- tutes during the year.	No. of teachers hold- ing State certificates.	No. of teachers hold- ing State Normal School certificates.	No. of legally quali- fied teachers in the county.	No. making teaching a permanent occupa- tion.	No. of teachers' cer- tificates suspended.	No. of teachers' cer- tificates revoked.
				First.	Second.	Third.	Special.									
Hillsdale.....	8	387	8	2	7	241	7	27	184	211	.....	4	264	184	.....	.....
Houghton.....	4	161	15	5	20	115	12	27	.....	58	4	36	176	180	.....	.....
Huron.....	6	375	25	5	12	110	13	20	20	110	8	1	140	110	.....	.....
Ingham.....	8	300	15	2	10	171	10	55	40	150	.....	7	245	105	.....	.....
Ionia.....	8	337	19	3	10	219	19	64	16	103	2	.....	284	.....	.....	.....
Iosco.....	4	64	.....	1	4	44	.....	5	9	40	.....	4	58	45	.....	.....
Iron.....	2	7	1	.....	1	2	1	.....	2	.....	.....	.....	14	18	.....	.....
Isabella.....	6	312	23	1	6	136	13	20	19	93	2	6	150	100	1	.....
Isle Royal.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jackson.....	9	655	22	7	21	353	8	123	187	211	2	32	376	289	2	1
Kalamazoo.....	7	.....	21	2	12	235	9	59	11	62	1	6	258	.....	.....	.....
Kalkaska.....	5	.....	8	2	3	61	5	9	7	6	.....	.....	67	.....	.....	.....
Kent.....	8	370	26	4	20	307	16	60	21	183	1	7	301	.....	.....	.....
Keweenaw.....	3	23	3	.....	2	11	3	6	1	10	.....	1	14	14	.....	.....
Lake.....	4	75	23	1	5	62	25	15	2	19	.....	4	68	45	.....	.....
Lapeer.....	6	310	35	1	14	189	19	60	8	100	.....	18	212	80	.....	.....
Leelanaw.....	6	79	12	1	2	59	11	11	2	28	.....	2	77	52	.....	.....
Lenawee.....	8	481	14	6	24	341	10	85	8	156	2	12	384	121	.....	.....
Livingston.....	8	297	14	2	3	243	12	46	.....	143	1	4	243	37	.....	.....
Luce.....	4	8	5	4	.....	8	3	5	.....	1	.....	.....	10	.....	.....	.....
Mackinac.....	4	21	10	1	.....	33	10	9	4	16	1	.....	39	34	.....	.....
Macomb.....	6	285	29	7	7	182	15	26	7	55	1	6	200	56	.....	.....
Manistee.....	5	143	24	1	2	79	12	7	6	61	.....	2	53	30	.....	.....
Manitou.....	2	4	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	5	5	.....	.....
Marquette.....	6	98	10	6	5	65	8	15	10	50	5	10	110	110	.....	.....
Mason.....	5	123	21	.....	9	70	21	25	17	55	.....	1	79	39	.....	.....
Mecosta.....	6	167	28	.....	26	97	20	29	5	85	.....	.....	143	5	.....	.....
Menominee.....	6	90	13	4	2	61	13	18	15	56	.....	.....	* 62	40	.....	.....
Midland.....	4	140	.....	2	4	88	38	12	13	58	.....	7	120	30	.....	.....
Missaukee.....	5	52	20	.....	4	38	15	1	10	21	.....	.....	44	41	.....	.....
Monroe.....	8	261	37	1	14	183	37	51	37	93	.....	5	223	70	.....	.....
Montcalm.....	8	400	48	3	7	310	44	85	26	102	1	3	325	.....	.....	.....
Montmoren'y.....	4	29	4	.....	.....	21	4	2	1	20	.....	.....	19	19	.....	.....
Muskegon.....	7	197	32	5	4	142	24	29	34	80	.....	4	159	108	.....	.....
Newaygo †.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oakland.....	8	527	60	4	9	342	45	75	70	160	4	15	380	250	.....	.....

* Exclusive of the teachers of Iron Mountain and Menominee City.

† No report received from this county.

TABLE XIV.—Continued.

Counties.	No. of public examinations.	Whole No. of applicants.	Candidates for special certificates.	Number of applicants receiving certificates.				No. licensed without experience in teaching.	No. of applicants having received some Normal instruction.	No. of applicants having attended institutes during the year.	No. of teachers holding State certificates.	No. of teachers holding State Normal School certificates.	No. of legally qualified teachers in the county.	No. making teaching a permanent occupation.	No. of teachers' certificates suspended.	No. of teachers' certificates revoked.
				First.	Second.	Third.	Special.									
Oceana.....	3		18	.....	.....	120	10	26	16	43	.....	.....	120	25	.....	.....
Ogemaw.....	4		5	2	1	49	4	5	13	26	.....	.....	46	45	.....	.....
Ontonagon.....	4	26	7	1	.....	11	7	6	.....	.....	.....	7	23	23	.....	.....
Oscoda.....	6	172	15	3	3	113	10	21	11	49	.....	3	129	123	.....	2
Oscoda.....	6	29	7	.....	.....	18	4	4	4	.....	.....	.....	18	5	.....	.....
Otsego.....	6	58	5	1	.....	43	5	10	6	37	.....	1	49	11	.....	.....
Ottawa.....	7	307	14	5	22	100	14	40	13	46	1	4	299	30	.....	1
Presque Isle.....	6	35	43	.....	.....	10	33	10	.....	13	2	.....	11	6	4	.....
Roscommon.....	6	30	9	.....	.....	26	9	12	11	17	.....	.....	14	14	.....	.....
Saginaw.....	8	391	19	3	10	213	16	57	29	125	1	1	411	51	.....	1
St. Clair.....	7	301	25	2	5	171	5	33	75	.....	2	4	184	10	.....	.....
St. Joseph.....	8	333	12	2	9	265	5	74	58	120	5	20	298	140	.....	.....
Sanilac.....	6	376	12	3	17	191	9	54	33	68	4	.....	310	198	.....	.....
Schoolcraft.....	4	32	7	.....	1	19	6	3	1	.....	1	.....	15	12	.....	.....
Shiawassee.....	3	233	29	5	5	233	29	55	12	89	1	4	290	50	.....	.....
Tuscola.....	7	379	25	4	6	279	16	58	237	107	.....	2	291	.....	.....	.....
Van Buren.....	7	445	5	1	9	290	4	30	100	5	3	3	301	160	.....	.....
Washtenaw.....	8	315	13	3	10	291	12	42	63	94	.....	9	290	.....	.....	.....
Wayne.....	8	310	7	6	4	261	5	11	29	29	.....	11	.....	70	.....	.....
Wexford.....	8	93	5	3	5	72	5	13	19	44	.....	1	81	40	.....	.....

TABLE XV.

Condition of Schools and School Houses as Reported by Secretaries of County Boards of School Examiners for the year ending Sept. 2, 1889.

Counties.	No. of districts visited by the secretary during the year.	No. of schools supplied with dictionary.	No. of schools supplied with maps.	No. of schools supplied with globes.	No. of school-houses properly ventilated and heated.	No. of schools having uniform text-books in each branch.	No. of schools having a prescribed course of study.	No. of schools properly classified.	No. of schools in which physiology, etc., is taught.	No. of districts that have adopted text-book in physiology, etc.
Totals	6,827	4,178	2,873	2,070	2,657	5,002	1,202	4,200	5,930	3,944
Alcona.....	25	16	25	6	1	25	25	23	25	25
Alger.....	11	7	9	9	9	11	-----	10	10	10
Allegan.....	184	127	61	43	96	158	72	160	143	-----
Alpena.....	37	23	30	20	43	32	43	40	35	43
Antrim.....	64	30	14	10	47	51	3	45	60	45
Arenac.....	26	24	22	24	2	27	1	27	27	27
Baraga.....	10	11	11	3	11	9	6	10	12	9
Barry.....	120	84	44	44	59	79	9	9	114	114
Bay.....	51	34	46	38	35	45	2	14	51	38
Benzie.....	44	19	14	11	32	33	5	27	43	-----
Berrien.....	123	119	75	50	49	133	39	100	145	145
Branch.....	120	82	61	63	106	120	33	95	124	-----
Calhoun.....	160	145	35	16	-----	100	160	160	160	160
Cass.....	113	86	65	39	113	103	4	113	113	113
Charlevoix.....	64	31	22	19	1	25	2	3	67	25
Cheboygan.....	50	23	42	9	40	42	3	37	50	46
Chippewa.....	35	23	25	18	16	20	1	30	38	1
Clare.....	35	20	26	18	36	21	2	40	42	3
Clinton.....	125	-----	-----	-----	-----	-----	6	-----	-----	-----
Crawford.....	42	18	24	10	27	11	1	33	42	6
Delta.....	25	26	24	21	21	24	10	22	12	6
Eaton.....	146	65	14	15	15	125	*	125	146	-----
Emmet.....	59	23	22	11	30	42	2	2	63	17
Genesee.....	157	146	68	48	103	147	18	149	152	125
Gladwin.....	23	10	12	13	-----	12	1	7	24	5
Gogebic.....	9	2	7	5	9	9	2	2	9	3
Grand Traverse....	61	32	39	30	40	47	10	51	50	48
Gratiot.....	129	89	3	17	7	81	11	38	115	90
Hillsdale.....	142	97	101	78	102	76	23	72	123	114
Houghton.....	20	25	23	23	20	25	25	25	25	10

* Almost all use the State's course of study, but few boards have adopted it formally.

TABLE XV.—Continued.

Counties.	No. of districts visited by the secretary during the year.	No. of schools supplied with dictionary.	No. of schools supplied with maps.	No. of schools supplied with globes.	No. of school-houses properly ventilated and heated.	In each branch.	No. of schools having a prescribed course of study.	No. of schools properly classified.	No. of schools in which physiology, etc., is taught.	No. of districts that have adopted text-book in physiology, etc.
Huron.....	109	78	40	80	70	88	10	86	90	75
Ingham.....	130	90	47	111	15	75	20	68	120	40
Iron.....	143	64	34	2	.....	100	15	9	128	.....
Iosco.....	31	13	31	16	8	30	4	8	22	18
Iron.....	8	8	8	7	.....	8	3	11	6	3
Isabella.....	99	25	38	39	29	91	1	65	94	78
Isle Royal.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jackson.....	100	139	64	41	35	51	13	144	148	133
Kalamazoo.....	139	120	66	41	10	98	39	68	123	75
Kalkaska.....	58	33	26	12	34	26	.....	33	9	16
Kent.....	219	140	116	120	30	196	30	59	206	210
Keweenaw.....	7	8	7	8	9	9	1	9	6	9
Lake.....	43	31	26	33	40	32	5	30	43	40
Lapeer.....	137	70	65	60	20	117	25	50	103	97
Leelanaw.....	53	16	6	4	.....	46	4	35	50	50
Lenawee.....	196	135	76	53	129	70	†	100	141	135
Livingston.....	111	44	14	19	13	70	4	73	103	.....
Luce.....	6	3	3	3	6	3	1	1	6	4
Mackinac.....	29	3	3	3	.....	3	.....	1	6	3
Macomb.....	113	55	36	25	30	90	13	109	113	51
Manistee.....	30	30	40	13	45	49	5	40	51	40
Manitou.....	4	.....	1	3	4	4	4	4	4	4
Marquette.....	26	36	36	36	20	36	26	36	36	36
Mason.....	53	33	34	5	47	36	.....	46	53	.....
Mecona.....	100	54	49	37	73	60	10	18	34	30
Menominee.....	43	33	17	13	3	25	10	7	27	.....
Midland.....	59	34	29	15	56	54	10	14	59	.....
Missaukee.....	40	14	37	14	20	21	23	30	37	.....
Monroe.....	140	56	29	30	116	120	15	110	71	50
Montcalm.....	125	84	63	41	123	123	12	131	111	91
Montmorency.....	21	15	13	13	.....	.....	.....	6	23	32
Muskegon.....	66	47	36	34	73	68	3	70	57	30
Newaygo.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oakland.....	216	117	40	32	200	111	30 [†]	190	196	120
Oceana.....	36	60	33	43	‡	35	3	70	36	70

† Nearly all are following a course of study prepared by the secretary.

‡ Generally well heated but poorly ventilated.

TABLE XV.—*Continued.*

Counties.	No. of districts visited by the secretary during the year.	No. of schools supplied with dictionary.	No. of schools supplied with maps.	No. of schools supplied with globes.	No. of school-houses properly ventilated and heated.	No. of schools having uniform text-books in each branch.	No. of schools having a prescribed course of study.	No. of schools properly classified.	No. of schools in which physiology, etc., is taught.	No. of districts that have adopted text-book in physiology, etc.
Ogemaw	41	34	36	28	38	41	1	40	41	25
Ontonagon	14	8	9	8	7	8	8	8	10	10
Osceola	92	45	30	18	1	60	10	66	76	84
Oscoda	20	4	3	5	6	18	-----	17	15	15
Otsego	38	24	26	19	3	18	1	20	34	3
Ottawa	118	89	55	47	109	104	3	109	101	89
Presque Isle	30	18	20	19	26	21	-----	30	34	34
Roscommon	16	4	10	4	-----	1	1	1	12	1
Saginaw	144	136	125	113	10	145	15	67	141	140
St. Clair	147	50	40	15	2	85	12	-----	125	100
St. Joseph	125	98	32	45	3	92	125	94	109	102
Sanilac	133	54	48	20	-----	130	4	4	135	135
Schoolcraft	15	8	9	4	5	10	10	12	13	-----
Shiawassee	123	45	65	12	-----	120	6	120	116	120
Tuscola	143	75	25	40	3	135	20	75	140	140
Van Buren	160	100	25	15	45	80	80	90	60	-----
Washtenaw	164	86	40	12	§	60	-----	144	164	-----
Wayne	139	122	75	**	**	††	‡‡	††	100	100
Wexford	69	59	63	41	50	48	30	56	60	60

§ All fairly well heated and ventilated.

** Very few.

†† Nearly all.

‡‡ Graded schools only.

TABLE XVI.

Miscellaneous Statistics as reported by Secretaries of County Boards of School Examiners for the year ending September 2, 1889.

Counties.	No. of meetings of Co. Teachers' Associations.	No. of meetings of Tp. Teachers' Associations.	No. of days devoted to meeting of the County Board.	Am't allowed by Board of Supervisors for stationery, etc.	Am't of per diem compensation received by members of the County Board other than the secretary.	Salary of the secretary.	Amount of Institute fees collected.
Totals.....	175	183	1,253½	\$3,687 14	\$10,958 72	\$62,000 00	\$9,201 00
Alcona.....	1	5	9	\$16 00	\$72 00	\$300 00	\$32 50
Alger.....	.....	.....	10	5 00	80 00	200 00	11 00
Allegan.....	3	6	24	39 80	202 00	1,250 00	238 50
Alpena.....	.....	.....	10	12 00	136 00	300 00	31 00
Antrim.....	.....	.....	40	16 67	160 00	650 00	55 00
Arenac.....	3	.....	8	31 70	70 72	300 00	40 00
Baraga.....	.....	.....	4	.....	32 00	250 00	15 00
Barry.....	3	12	29	145 05	232 00	1,000 00	202 50
Bay.....	4	.....	19	.....	76 00	510 00	61 50
Benzie.....	5	.....	7	5 00	102 00	300 00	48 00
Berrien.....	2	.....	12	28 32	96 00	1,000 00	279 50
Branch.....	3	8	15	97 00	120 00	1,200 00	274 00
Calhoun.....	3	5	38	100 00	132 00	1,250 00	335 00
Cass.....	2	7	45	104 00	360 00	800 00	171 50
Charlevoix.....	2	.....	17	.....	136 00	670 00	81 00
Cheboygan.....	3	.....	25½	8 50	204 00	450 00	55 00
Chippewa.....	.....	.....	16	15 00	128 00	300 00	52 50
Clare.....	1	.....	17	.....	136 00	430 00	37 50
Clinton.....	2	3	.....	.....	.....	1,100 00	174 50
Crawford.....	.....	.....	9	.....	72 00	300 00	18 50
Delta.....	.....	.....	5	25 00	40 00	300 00	28 50
Eaton.....	3	.....	15	132 00	160 00	1,450 00	198 50
Emmet.....	4	.....	14	25 00	60 00	300 00	59 50
Genesee.....	3	.....	18	.....	144 00	1,400 00	140 50
Gladwin.....	3	.....	10	15 00	80 00	250 00	14 50
Gogebic.....	.....	.....	6	10 00	40 00	300 00	14 00
Grand Traverse.....	2	.....	16	.....	182 00	650 00	71 50
Gratiot.....	2	.....	15	60 00	120 00	1,200 00	151 00
Hillsdale.....	3	14	9	42 00	138 00	1,400 00	172 00

TABLE XVI.—Continued.

Counties.	No. of meetings of Co. Teachers' Associations.	No. of meetings of Tp. Teachers' Associations.	No. of days devoted to meeting of the County Board.	Am't allowed by Board of Supervisors for sta- tionery, etc.	Am't of per diem com- pensation received by members of the County Board other than the secretary.	Salary of the secre- tary.	Amount of institute fees collected.
Houghton.....	1	.....	14	\$75 00	\$112 00	\$300 00	\$70 50
Huron.....	.....	.....	.....	156 00	216 00	1,000 00	101 00
Ingham.....	4	.....	25	140 00	200 00	1,250 00	259 00
Ionia.....	8	4	8	200 00	64 00	1,426 00	192 50
Iosco.....	8	.....	.....	.....	58 00	800 00	46 50
Iron.....	.....	.....	5	5 00	40 00	800 00	5 50
Isabella.....	2	5	16	30 00	128 00	900 00	101 00
Isle Royal.....	.....	.....	.....	.....	.....	.....	.....
Jackson.....	8	4	29	136 95	232 00	1,500 00	269 00
Kalamazoo.....	8	4	19	62 70	152 00	1,200 00	208 50
Kalkaska.....	1	.....	14	56 83	112 00	540 00	38 50
Kent.....	2	.....	46	150 00	252 00	1,500 00	189 50
Keweenaw.....	.....	.....	9	5 00	72 00	100 00	21 50
Lake.....	4	1	9	3 67	78 00	500 00	49 00
Lapeer.....	8	2	7	54 00	160 00	1,200 00	216 00
Leelanaw.....	2	.....	14	78 86	122 00	500 00	47 50
Lenawee.....	8	.....	19	96 50	152 00	1,200 00	356 50
Livingston.....	2	5	10	25 48	192 00	1,000 00	208 00
Luce.....	.....	.....	8	4 50	32 00	150 00	4 00
Mackinac.....	.....	.....	18	10 00	216 00	320 00	26 50
Macomb.....	2	6	25	85 00	200 00	1,100 00	140 00
Manistee.....	6	5	5	11 85	40 00	520 00	113 50
Manitou.....	.....	.....	4	.....	32 00	40 00	3 50
Marquette.....	1	.....	20	200 00	160 00	360 00	83 00
Mason.....	6	.....	18	45 13	144 00	560 00	53 00
Mecosta.....	1	19	2	129 81	128 00	950 00	122 00
Menominee.....	1	.....	8	15 00	48 00	435 00	40 00
Midland.....	.....	.....	17	17 05	189 00	450 00	55 50
Missaukee.....	1	.....	13	24 80	104 00	450 00	29 50
Monroe.....	5	.....	18	25 00	144 00	800 00	145 00
Montcalm.....	4	.....	16	.....	128 00	1,350 00	190 00
Montmorency.....	.....	.....	6	5 00	48 00	800 00	17 50
Muskegon.....	4	.....	11	.....	88 00	910 00	101 50
Newaygo.....	.....	.....	.....	.....	.....	.....	.....
Oakland.....	.....	.....	25	75 00	200 00	1,500 00	264 50

SUPERINTENDENT'S REPORT.

TABLE XVI.—Continued.

Counties.	No. of meetings of Co. Teachers' Associations.	No. of meetings of Tp. Teachers' Associations.	No. of days devoted to meeting of the County Board.	Am't allowed by Board of Supervisors for sta- tionery, etc.	Am't of per diem com- pensation received by members of the County Board other than the secretary.	Salary of the secre- tary.	Amount of Institute fees collected.
Oceana.....	2	.....	8	\$80 00	\$84 00	\$850 00	\$97 00
Ogemaw.....	3	.....	9	5 50	56 00	440 00	88 50
Ontonagon.....	.....	.....	12	9 00	96 00	300 00	16 00
Osceola.....	3	15	10	.....	80 00	900 00	98 00
Oscoda.....	2	.....	26	.....	208 00	260 00	14 50
Otsego.....	.....	.....	15	10 50	120 00	300 00	88 50
Ottawa.....	15	.....	40	65 00	160 00	1,150 00	198 00
Presque Isle.....	.....	.....	6	12 00	48 00	600 00	25 00
Roscommon.....	.....	.....	6	5 00	36 00	150 00	18 50
Saginaw.....	.....	.....	66	85 00	612 00	1,470 00	252 00
St. Clair.....	.....	.....	10	.....	80 00	1,400 00	.....
St. Joseph.....	2	3	13	55 00	160 00	1,250 00	201 50
Sanilac.....	3	.....	6	.....	48 00	1,000 00	179 00
Schoolcraft.....	.....	.....	12	.....	96 00	300 00	14 50
Shiawassee.....	3	.....	17	175 00	186 00	1,000 00	188 00
Tuscola.....	2	.....	30	.....	240 00	1,480 00	205 50
Van Buren.....	10	.....	12	30 00	96 00	1,200 00	204 50
Washtenaw.....	.....	.....	16	58 47	150 00	1,200 00	181 50
Wayne.....	2	.....	16	200 00	.....	1,500 00	438 50
Wexford.....	4	.....	8	.....	64 00	600 00	44 00

TABLE XVII.

Showing the Extent to which Physiology was Taught in the Schools of the State during the year ending September 2, 1899, compiled from Inspectors reports.

Counties.	No. of districts in the county.	No. of districts reporting physiology taught.	No. of districts reporting physiology not taught.	No. of districts not reporting.
Totals.....	7,145	5,850	655	1,140
Alcona.....	25	15	3	7
Alger.....	10	9	.....	1
Allegan.....	184	135	.....	49
Alpena.....	22	13	6	3
Antrim.....	69	55	4	10
Arenac.....	29	27	.....	2
Baraga.....	12	9	2	1
Barry.....	147	99	24	24
Bay.....	55	51	2	2
Benzie.....	43	39	.....	4
Berrien.....	149	118	10	21
Branch.....	130	98	16	16
Calhoun.....	163	125	7	31
Cass.....	116	94	.....	22
Charlevoix.....	69	54	4	11
Cheboygan.....	50	38	3	9
Chippewa.....	38	35	1	2
Clare.....	36	26	2	8
Clinton.....	129	102	8	19
Crawford.....	40	30	4	6
Delta.....	36	20	9	7
Eaton.....	147	98	19	30
Emmet.....	60	54	2	4
Genesee.....	159	125	19	15
Gladwin.....	24	16	3	5
Gogebic.....	10	7	1	2
Grand Traverse.....	65	62	1	2
Gratiot.....	129	105	7	17
Hilldale.....	167	139	18	15
Houghton.....	25	18	2	5

SUPERINTENDENT'S REPORT.

TABLE XVII.—*Continued.*

Counties.	No. of districts in the county.	No. of districts reporting physiology taught.	No. of districts reporting physiology not taught.	No. of districts not reporting.
Huron.....	108	87	7	14
Ingham.....	135	96	16	23
Ionia.....	144	93	18	33
Iosco.....	25	21	-----	4
Iron.....	11	8	-----	3
Isabella.....	100	98	1	1
Isle Royal.....	-----	-----	-----	-----
Jackson.....	158	112	9	37
Kalamazoo.....	138	87	25	26
Kalkaska.....	53	42	2	9
Kent.....	218	162	22	34
Keweenaw.....	9	8	1	-----
Lake.....	50	39	3	8
Lapeer.....	138	102	14	22
Leelanaw.....	53	43	-----	5
Lenawee.....	199	136	24	39
Livingston.....	135	83	22	30
Luce.....	10	5	1	4
Mackinac.....	32	17	6	9
Macomb.....	112	101	3	8
Manistee.....	52	43	1	3
Manitou.....	4	2	-----	2
Marquette.....	36	31	-----	5
Mason.....	55	47	-----	8
Mecosta.....	100	80	4	16
Menominee.....	44	31	9	4
Midland.....	60	50	1	9
Missaukee.....	44	32	3	9
Monroe.....	137	76	29	32
Montcalm.....	136	103	14	19
Montmorency.....	23	17	5	1
Muskegon.....	89	71	12	6
Newaygo.....	109	83	8	18
Oakland.....	214	123	53	38
Oceana.....	88	73	3	12
Ogemaw.....	42	36	2	4
Ontonagon.....	16	8	2	6
Osceola.....	91	71	9	11

TABLE XVII.—*Continued.*

Counties.	No. of districts in the county.	No. of districts re- porting physiology taught.	No. of districts re- porting physiology not taught.	No. of districts not reporting.
Oscoda.....	80	17	2	11
Otsego.....	40	82	2	6
Ottawa.....	121	101	10	10
Presque Isle.....	32	19	7	6
Roscommon.....	20	13	2	5
Saginaw.....	149	143	3	3
St. Clair.....	155	110	14	31
St. Joseph.....	125	84	17	34
Sanilac.....	138	108	2	28
Schoolcraft.....	18	9	2	7
Shiawassee.....	126	77	9	40
Tuscola.....	144	122	4	18
Van Huren.....	154	109	18	27
Washtenaw.....	168	100	26	42
Wayne.....	151	96	34	21
Wexford.....	68	62	2	4

TABLE XVIII.—Graded School Statistics, compiled from Inspectors' Reports for the Year ending September 2, 1889.

Districts.	Counties.	No. of children between 5 and 20 years.	Estimated valuation of school property.	Amount paid for maintenance and	Total indebtedness.		No. of children that attended school during the year.	No. of days of school.	No. of teachers employed.		Total wages of teachers for the year.	
									Men.	Women.	Men.	Women.
Totals.....	.....	339,184	\$9,100,437	\$1,798.54	9,619 55	301,087	94,986	681	3,430	\$467,366 55	\$1,323,432 39
Ada.....	Kent.....	147	25,500	9946 00	.....	128	180	1	2	3468 00	9478 00
Addison.....	Lenawee.....	110	1,500	1,125 00	.....	80	180	1	2	675 00	450 00
Adrian.....	Lenawee.....	2,432	104,000	14,561 00	.....	1,433	200	3	29	3,300 00	10,791 00
Akron.....	Tuscola.....	122	1,500	181 00	845 08	91	140	1	1	255 00	167 50	
Albion.....	Calhoun.....	1,195	55,000	5,968 00	11,574 81	367	186	2	15	1,175 00	4,763 00	
Alaska.....	Kent.....	99	2,000	510 00	618 81	87	180	1	1	450 00	60 00	
Algonac.....	St. Clair.....	327	9,000	1,575 00	2,459 90	260	180	1	3	675 00	900 00	
Allegan.....	Allegan.....	843	15,000	5,645 64	8,503 07	617	190	2	15	1,053 14	4,532 50	
Allen.....	Hillsdale.....	123	3,000	337 50	1,053 14	105	180	1	2	450 00	387 50	
Allouez.....	Keweenaw.....	304	2,000	1,355 00	2,233 20	171	175	1	2	675 00	680 00	
Alma.....	Gratiot.....	531	25,000	3,690 00	5,809 55	533	196	4	7	1,300 00	1,790 00	
Almont.....	Lapeer.....	311	15,000	2,067 50	5,500 00	284	200	1	5	500 00	1,260 00	
Alpena.....	Alpena.....	3,627	55,000	14,250 00	25,590 18	1,694	200	3	27	4,350 00	9,900 00	
Ann Arbor.....	Washtenaw.....	3,006	191,000	23,303 54	29,000 00	1,969	190	9	39	10,368 10	15,946 44	
Armada.....	Macomb.....	231	5,500	1,436 00	311 00	217	175	1	4	700 00	736 00	
Ashley.....	Gratiot.....	232	3,000	366 31	1,910 32	174	180	2	2	421 31	475 00	
Athens.....	Calhoun.....	112	4,000	935 00	1,064 28	88	176	1	2	495 00	430 00	
Atlantic Mine.....	Houghton.....	360	5,500	1,500 00	4,943 21	208	196	1	2	900 00	900 00	
Attica.....	Lapeer.....	223	1,000	380 75	1,111 26	155	200	1	2	442 00	418 75	

GRADED SCHOOL STATISTICS.

Augusta.....	196	7,000	1,455 00	06 07	31 07	8,176 49	1,000 00	103	176	1	3	600 00	855 00
Au Sable.....	1,310												
Au Train.....	61	1,850	833 00	52 00		1,526 17		40	196	2		882 00	
Bad Axe.....	853	5,500	1,550 00	65 00	30 00	2,569 10	3,000 00	281	200	1	3	650 00	900 00
Baldwin.....	157	2,500	1,000 00	60 00	40 00	1,893 98	1,500 00	151	200	1	1	600 00	400 00
Bancroft.....	187	6,000	1,638 00	85 55	22 15	8,223 84	4,450 98	143	180	1	8	770 00	868 00
Bangor Tp. No. 3 fl.....	253	4,800	2,108 00		44 81	2,657 68		308	190		5		2,108 00
Bangor Tp. No. 3 fl.....	84	2,000	630 00	45 00	25 00	763 25		88	180	1	1	405 00	225 00
Baraga.....	350	2,000	1,200 00	80 00	40 00	1,423 45		237	200	1	1	800 00	400 00
Bath.....	134	3,000	667 50	51 25	22 50	898 25		92	156	2	2	307 50	380 00
Battle Creek.....	3,670	185,000	15,919 50	115 00	35 10	41,897 36	24,000 00	1,837	196	2	40	2,300 00	13,619 50
Bay City.....	9,109	195,000	37,109 19	105 34	41 12	68,926 52	9,200 00	3,947	196	4	80	4,313 50	32,895 69
Beacon.....	785	18,000	6,180 00	150 84	60 70	12,533 84	5,230 00	551	200	2	8	1,810 10	4,370 00
Bear Lake.....	170	4,000	990 00	60 00	50 00	1,847 59	1,000 00	139	180	1	1	540 00	450 00
Belding.....	386	8,000	1,650 00	75 00	30 00	2,799 25	2,500 00	278	200	1	5	750 00	900 00
Bellaire.....	163	100	855 00	60 00	35 00	2,432 42	3,000 00	127	180	1	2	540 00	815 00
Belleville.....	171	10,000	1,330 00	54 50	24 00	2,117 91		154	200	2	1	1,090 00	240 00
Bellevue.....	310	7,000	1,850 00	50 37	29 00	2,324 45		231	180	2	4	808 00	1,044 00
Benton Harbor.....	1,054	35,000 00	5,855 00	111 11	35 22	11,205 77	8,000 00	727	180	1	15	1,000 00	4,855 00
Berlin.....	112	1,000	720 00		40 00	787 26		98	177		2		720 00
Berrien Springs.....	248	9,000	1,680 00		37 33	2,689 12		172	180		5		1,680 00
Bessemer.....	437	12,000	3,650 00	120 00	50 00	7,850 15	6,000 00	434	197	1	5	1,300 00	2,450 00
Big Rapids.....	1,750	50,000	10,714 50	150 00	40 06	18,654 76		1,400	197	1	23	1,500 00	9,214 50
Birmingham.....	311	15,000	2,890 00	65 79	32 80	4,148 32		829	200	2	5	1,350 00	1,640 00
Blissfield No. 1 fl.....	183	5,000	1,380 00	70 00	22 67	2,232 28		170	200	1	3	700 00	680 00
Blissfield No. 2 fl.....	205	3,000	1,480 00	60 00	29 33	2,183 40		168	200	1	3	600 00	880 00
Bloomington.....	174	3,500	1,278 48	55 55	28 83	2,049 54	1,000 00	189	180	1	3	499 98	778 50
Boyer City.....	152	5,000	1,080 00	50 00	35 00	1,630 79	3,000 00	142	180	1	2	450 00	630 00

SUPERINTENDENT'S REPORT.

TABLE XVIII.—Continued.

Districts.	Counties.	No. of children between 5 and 20 years.	Estimated valuation of school property.	Amount paid for superintendence and instruction.	Average monthly wages to teachers.		Total expenditures.	Total indebtedness.	No. of children that attended school during the year.	No. of days school.	No. of teachers employed.		Total wages of teachers for the year.	
					Men.	Women.					Men.	Women.	Men.	Women.
Breckenridge.....	Gratiot.....	114	\$1,000	\$643 75	\$41 53	\$30 00	\$391 90	.....	99	180	1	1	\$373 75	\$270 00
Breedsville.....	Van Buren.....	123	1,200	677 00	45 00	30 22	773 40	.....	63	180	1	1	405 00	272 00
Bridgehampton Tp. 2.....	Sanilac.....	152	500	510 00	45 00	20 00	690 80	.....	115	200	1	1	450 00	60 00
Bridgeport.....	Saginaw.....	127	2,500	747 00	50 00	33 00	906 93	.....	90	178	1	1	450 00	297 00
Brighton.....	Livingston.....	236	16,000	1,840 00	75 00	27 25	2,347 29	.....	190	200	1	4	750 00	1,000 00
Britton.....	Lenawee.....	122	2,850	625 00	38 00	27 62	715 04	.....	85	200	1	2	296 00	289 00
Bronson.....	Branch.....	319	5,000	1,600 00	77 78	33 33	2,298 96	.....	237	180	1	3	700 00	900 00
Brooklyn.....	Jackson.....	220	12,000	1,550 00	65 00	30 00	2,382 85	.....	213	200	1	3	650 00	900 00
Brown City.....	Sanilac.....	176	2,500	699 00	50 00	19 90	4,015 69	\$3,000 00	139	200	1	1	500 00	199 00
Buchanan.....	Berrien.....	515	40,000	4,150 00	90 00	34 21	7,657 41	2,000 00	496	190	1	12	900 00	3,350 00
Buena Vista Tp. No. 6.....	Saginaw.....	314	6,000	840 00	49 00	35 00	2,017 99	.....	148	196	1	2	490 00	350 00
Burlington.....	Calhoun.....	112	2,000	680 00	40 00	20 00	925 76	.....	110	177	1	2	380 00	320 00
Burnips Corner.....	Allegan.....	90	2,800	657 00	50 00	23 00	1,411 25	536 00	87	176	1	1	450 00	237 00
Burr Oak.....	St. Joseph.....	246	15,000	1,485 00	45 00	25 00	1,880 81	.....	208	180	2	3	810 00	675 00
Butlersville.....	Mason.....	192	4,000	1,270 00	51 11	30 00	1,984 30	1,540 15	124	180	1	3	460 00	810 00
Byron Centre.....	Kent.....	128	2,500	590 62	45 00	23 27	774 59	.....	111	180	1	1	405 00	185 62
Byron.....	Shlawassee.....	136	5,000	1,226 00	70 00	27 63	1,420 22	40 00	126	200	1	2	700 00	523 00
Cadillac.....	Wexford.....	1,206	37,500	9,469 00	75 83	47 93	21,480 69	14,752 50	1,025	200	3	16	2,275 00	7,194 00
Caledonia.....	Kent.....	178	2,000	910 00	55 00	24 00	958 35	.....	150	200	1	2	550 00	380 00
Calumet.....	Houghton.....	3,450	7,000	22,283 58	95 00	49 25	30,464 18	.....	2,302	195	6	25	5,850 00	16,433 53

GRADED SCHOOL STATISTICS.

Cannonaburg.....	108	1,800	535 00	40 00	21 87	512 55	50 00	78	180	1	1	360 00	175 00
Capeo.....	243	7,000	1,250 00	50 00	25 00	2,917 03	350 00	175	200	1	3	500 00	750 00
Caro.....	493	20,000	8,714 00	.....	30 44	7,822 33	15,000 00	486	200	.....	9	.....	8,550 00
Carrollton Tp. No. 1.....	475	10,000	1,533 87	30 32	25 76	3,532 49	8,000 00	285	195	6	5	1,023 25	515 62
Carrollton Tp. No. 2.....	223	2,400	775 00	42 50	35 00	1,039 81	.....	126	197	1	1	425 00	350 00
Carson City.....	383	2,000	2,020 00	81 40	32 21	7,713 23	10,000 00	280	200	2	5	731 60	1,238 40
Carsonville.....	217	2,000	650 00	45 00	20 00	1,036 01	.....	150	200	1	1	450 00	200 00
Caseville.....	245	5,000	1,386 00	45 00	20 44	1,531 16	.....	130	200	1	3	650 00	738 00
Casnovia.....	118	2,000	855 00	60 00	35 00	1,141 23	.....	125	177	1	1	540 00	315 00
Cass City.....	309	9,000	1,625 00	50 00	31 25	2,569 50	8,000 00	301	200	2	2	1,000 00	625 00
Cassopolis.....	377	15,000	3,336 00	100 00	37 67	5,057 19	.....	370	200	1	7	1,000 00	2,336 00
Cedar Springs.....	373	20,000	2,454 00	.....	43 05	3,417 18	.....	291	190	.....	6	.....	2,454 00
Central Mine.....	341	7,000	1,535 00	80 62	45 00	2,204 62	.....	214	180	1	2	725 00	310 00
Centreville.....	274	20,000	2,475 00	57 50	33 12	3,302 41	.....	236	200	2	4	1,150 00	1,325 00
Ceresco.....	88	800	627 75	50 00	29 63	717 54	.....	76	180	1	1	450 00	177 75
Charlevoix.....	450	20,000	2,345 00	105 56	31 00	13,431 97	1,300 00	351	180	1	5	950 00	1,395 00
Charlotte.....	1,064	24,000	10,574 75	115 00	29 55	15,243 98	.....	1,046	187	2	21	2,300 00	8,274 75
Chase.....	228	3,000	1,850 00	80 00	35 00	2,150 79	.....	216	200	1	3	800 00	1,050 00
Cheboygan.....	1,698	10,000	6,826 50	65 75	36 02	10,409 33	1,800 00	965	197	6	8	3,945 00	2,881 50
Chelsea.....	421	6,000	3,172 00	80 00	33 39	4,494 39	123 79	331	200	1	8	800 00	2,372 00
Chesaning.....	412	15,500	2,500 00	70 00	30 00	5,523 59	2,500 00	355	195	1	6	700 00	1,800 00
Chickaming Tp. No. 3.....	155	500	257 50	25 00	28 93	280 45	.....	116	160	1	2	50 00	202 50
Chippewa Lake.....	138	2,500	900 00	55 00	35 00	2,417 39	.....	120	200	1	1	550 00	350 00
Clare.....	384	3,500	1,602 97	70 00	30 09	2,115 62	.....	238	200	1	4	700 00	902 97
Clarkston.....	153	2,000	1,290 00	75 00	27 00	1,493 17	.....	153	200	1	2	750 00	540 00
Clayton.....	113	3,000	810 00	60 00	30 00	1,187 09	.....	112	180	1	1	540 00	270 00
Clifford.....	163	3,100	576 00	40 00	24 00	970 71	8,000 00	120	175	1	1	360 00	216 00
Climax.....	143	2,500	902 00	43 88	29 32	1,038 80	.....	109	180	1	2	395 00	507 00

SUPERINTENDENT'S REPORT.

TABLE XVIII.—Continued.

Districts.	Counties.	No. of children between 5 and 20 years.	Estimated valuation of school property.	Amount paid for salaries and instruction.	Average monthly wages to teachers.		Total expenditures.	Total indebtedness.	No. of children that attended school during the year.	No. of days of school.	No. of teachers employed.		Total wages of teachers for the year.	
					Men.	Women.					Men.	Women.	Men.	Women.
Clinton	Lenawee	298	\$7,000	\$2,000 00	\$80 00	\$30 00	\$3,357 06	.....	241	200	1	4	\$800 00	\$1,900 00
Clio	Genesee	220	6,000	1,126 00	57 50	27 50	2,046 84	\$5,000 00	173	185	1	2	575 00	550 00
Coldwater	Branch	1,262	71,000	10,444 00	93 33	38 22	20,738 92	9,000 00	1,101	194	3	20	2,800 00	7,644 00
Coleman	Midland	184	1,200	758 75	.....	37 94	982 05	.....	98	200	.....	2	.....	758 75
Coloma	Berrien	176	850	770 00	55 55	30 00	903 42	.....	130	176	1	1	500 00	270 00
Colon	St. Joseph	161	3,000	1,170 00	65 00	33 50	1,467 54	18 00	128	180	1	2	585 00	603 00
Columbiaville	Lapeer	200	1,000	1,000 00	50 00	25 00	1,450 55	.....	142	198	1	2	500 00	500 00
Comstock Tp. No. 1 fl.	Kalamazoo	111	800	492 50	.....	27 36	606 33	.....	74	175	.....	3	.....	492 50
Concord	Jackson	196	7,000	1,780 00	70 00	30 00	2,374 74	.....	192	185	1	4	700 00	1,080 00
Constantine	St. Joseph	350	32,000	3,550 00	110 00	35 00	4,554 07	.....	315	200	1	7	1,100 00	2,450 00
Coopersville	Ottawa	250	5,000	1,395 00	60 00	30 55	1,688 71	.....	205	190	1	3	540 00	855 00
Coral	Montcalm	174	2,000	840 00	49 00	35 00	1,185 43	.....	173	200	1	1	490 00	850 00
Corunna	Shlawassee	426	28,500	3,660 00	100 00	33 25	8,927 74	4,200 00	394	200	1	8	1,000 00	2,660 00
Covert	Van Buren	184	1,200	760 00	45 00	25 00	1,034 31	.....	153	160	1	2	360 00	400 00
Croswell	Sanilac	300	4,000	1,150 00	60 00	27 50	2,250 40	900 00	140	200	1	2	600 00	550 00
Crystal Falls	Iron	294	10,000	2,100 00	.....	52 50	3,815 44	8,000 00	231	196	.....	4	.....	2,100 00
Custer	Mason	141	2,500	765 00	50 00	35 00	1,199 08	1,405 00	97	180	1	1	450 00	315 00
Dansville	Ingham	118	5,000	1,398 00	60 00	28 50	2,422 67	.....	154	190	1	3	600 00	798 00
Davisburg	Oakland	75	1,200	449 00	36 00	25 00	562 18	.....	77	180	1	1	324 00	125 00
Davison	Genesee	146	4,000	525 00	29 18	1,203 05	1,000 00	120	176	2	525 00

GRADED SCHOOL STATISTICS.

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SUPERINTENDENT'S REPORT.

TABLE XVIII.—Continued.

Districts.	Counties.	No. of children between 5 and 20 years.	Estimated valuation of school property.	Amount paid for superintendence and instruction.	Average monthly wages to teachers.		Total expenditures.	Total indebtedness.	No. of children that attended school during the year.	No. of days of school.	No. of teachers employed.		Total wages of teachers for the year.	
					Men.	Women.					Men.	Women.	Men.	Women.
Escanaba	Delta	1,814	\$40,000	\$5,608 75	\$120 00	\$40 45	\$17,257 34	\$21,469 03	707	200	1	11	\$1,200 00	\$4,408 75
Essexville	Bay	523	7,000	2,300 00	56 67	41 43	4,036 68	300 00	319	197	2	4	850 00	1,450 00
Evart	Osceola	449	5,000	2,889 00	110 00	29 82	3,541 00	1,500 00	457	200	1	6	1,100 00	1,789 00
Erie	Monroe	182	6,000	720 00	-----	40 00	1,298 02	880 00	149	180	-----	2	-----	720 00
Farmington	Oakland	124	6,000	1,000 00	70 00	30 00	3,344 38	3,980 00	122	200	1	1	700 00	300 00
Farwell	Clare	238	4,000	1,215 00	65 00	35 00	1,657 59	-----	184	179	1	2	535 00	630 00
Fayette	Delta	129	-----	988 55	60 85	36 00	1,821 87	-----	135	200	1	2	608 55	380 00
Fenton	Genesee	564	50,000	5,322 50	70 00	35 66	10,033 63	1,000 00	546	200	2	11	1,400 00	3,922 50
Fennville	Allegan	206	1,800	567 50	43 75	26 83	709 72	10 00	152	180	1	4	175 00	402 50
Ferrysburg	Ottawa	242	1,500	920 00	80 00	22 00	1,205 14	-----	195	200	1	2	480 00	440 00
Fife Lake	G'd Traverse ..	121	4,000	715 00	44 45	35 00	1,450 53	849 00	103	180	1	1	400 00	315 00
Fiber City	Manistee	269	2,500	725 00	55 00	35 00	1,395 32	-----	160	200	1	1	550 00	175 00
Fillmore Center	Allegan	161	800	440 00	-----	24 45	632 51	-----	116	180	-----	3	-----	440 00
Fillmore Tp. No. 4	Allegan	149	875	499 50	-----	31 22	721 22	-----	114	180	-----	2	-----	499 50
Fillmore Tp. No. 1	Allegan	154	2,000	560 00	40 00	25 00	645 70	-----	125	176	1	1	380 00	200 60
Fillmore Tp. No. 5	Allegan	119	1,600	406 50	-----	31 27	571 56	-----	90	140	-----	2	-----	406 50
Flat Rock	Wayne	222	13,000	1,232 56	73 25	27 50	1,681 15	-----	145	200	1	2	782 56	550 00
Flint	Genesee	2,374	135,000	16,737 95	125 00	38 43	35,838 44	57,000 00	1,811	200	2	37	2,500 00	14,237 95
Flushing	Genesee	289	8,000	1,900 00	50 00	30 00	2,428 96	-----	188	195	2	3	1,000 00	900 00
Ford River	Delta	130	3,000	875 00	-----	48 61	1,737 82	1,228 42	111	198	-----	3	-----	875 00

GRADED SCHOOL STATISTICS.

Fostoria.....	143	8,500	585 00	40 00	25 00	1,891 23	1,630 00	96	180	1	1	180 00	235 00
Forestville.....	186	1,000	598 00	40 00	22 00	676 23	85 00	115	180	1	1	240 00	198 00
Fort Gratiot.....	804	25,000	8,150 00	100 00	35 83	19,558 23	15,782 24	579	200	1	6	1,000 00	2,150 00
Fowler.....	121	1,800	660 00	50 00	32 50	808 00	.....	70	160	1	1	400 00	260 00
Fowlerville.....	300	2,500	2,500 00	70 00	30 00	8,047 26	.....	270	200	1	6	700 00	1,800 00
Frankfort.....	444	5,500	8,250 00	61 50	33 67	3,833 17	739 92	395	196	2	6	1,230 00	2,020 00
Franklin Tp. No. 1.....	248	1,200	800 00	.....	40 00	1,025 45	.....	186	196	.....	2	.....	800 00
Franklin Tp. No. 2.....	290	4,000	1,700 00	80 00	45 00	3,097 41	.....	199	198	1	2	800 00	900 00
Franklin Tp. No. 5.....	317	2,000	1,640 00	.....	45 00	2,138 88	.....	189	195	.....	1	.....	450 00
Freeland.....	118	2,500	605 00	44 44	25 00	738 47	.....	98	198	1	1	355 50	250 00
Freeport.....	145	1,200	575 00	45 00	28 21	754 56	.....	136	180	1	4	180 00	395 00
Freesoil.....	101	1,400	630 00	.....	35 00	842 49	183 00	97	180	.....	3	.....	630 00
Fremont.....	435	10,000	1,900 00	75 00	28 75	2,336 67	2,500 00	394	200	1	4	750 00	1,150 00
Fruitport.....	115	3,000	671 63	44 63	20 00	777 08	.....	70	180	1	1	401 63	270 00
Gaines Station.....	150	5,000	990 00	50 00	30 62	4,212 38	3,210 00	146	195	1	2	500 00	490 00
Galesburg.....	175	10,000	1,756 00	49 75	32 00	2,233 36	.....	193	200	2	3	786 00	960 00
Gallen.....	204	5,000	1,460 00	72 22	30 00	1,776 96	.....	189	180	1	3	650 00	810 00
Garden.....	308	4,000	1,230 00	50 00	40 00	2,940 63	2,160 00	230	180	2	1	900 00	360 00
Gaylord.....	178	1,000	1,105 00	43 89	35 00	1,471 78	.....	140	180	2	1	790 00	315 00
Girard.....	77	2,500	675 00	45 00	30 00	773 80	.....	66	178	1	1	405 00	270 00
Gladstone.....	303	3,200	1,555 00	53 48	57 06	3,607 26	8,100 00	243	200	2	3	585 00	970 00
Gobleville.....	160	2,000	978 06	60 80	27 82	1,132 40	790 00	140	180	2	2	486 41	491 67
Goodrich.....	77	2,500	735 00	52 50	30 00	799 65	.....	75	200	1	1	525 00	210 00
Graafschap.....	199	2,650	700 00	.....	35 00	1,041 67	.....	168	200	.....	2	.....	700 00
Grand Blanc.....	100	2,000	680 00	35 00	35 00	735 50	.....	70	180	1	1	315 00	315 00
Grand Haven.....	2,016	50,000	8,960 00	82 50	31 78	14,037 05	.....	1,263	200	2	23	1,650 00	7,310 00
Grand Ledge No. 9.....	248	9,900	1,737 77	77 77	80 00	4,436 20	7,000 00	256	200	1	3	777 77	960 00
Grand Ledge No. 11 fl.....	265	8,000	1,500 00	60 00	30 00	5,124 99	8,621 00	211	200	1	3	600 00	900 00

SUPERINTENDENT'S REPORT.

TABLE XVIII.—Continued.

Districts.	Counties.	No. of children be- tween 5 and 20 years.	Estimated valuation of school property.	Amount paid for su- perintendence and instruction.	Average monthly wages to teachers.		Total expenditures.	Total indebtedness.	No. of children that attended school dur- ing the year.	No. of days of school.	No. of teachers employed.		Total wages of teachers for the year.	
					Men.	Women.					Men.	Women.	Men.	Women.
Grand Rapids.....	Kent.....	15,602	\$680,000	\$114,375 42	\$174 17	\$49 25	\$223,871 33	\$204,000 00	10,370	200	6	211	\$10,450 00	\$103,925 42
Grand Rapids Tp. No. 1....	Kent.....	775	19,000	3,240 00	100 00	32 00	5,100 46	14,500 00	461	200	1	7	1,000 00	2,240 00
Grand Rapids Tp. No. 6....	Kent.....	393	2,500	1,472 13	44 77	33 05	2,332 71	.....	225	200	1	4	447 75	1,024 38
Grand Rapids Tp. No. 15..	Kent.....	546	5,000	1,410 00	65 00	29 23	2,433 00	2,950 00	275	200	1	3	650 00	780 00
Grandville.....	Kent.....	271	10,000	1,822 50	68 25	33 53	2,246 72	.....	257	200	1	4	632 50	1,140 00
Grass Lake.....	Jackson.....	200	9,000	2,454 50	120 65	32 00	3,144 21	.....	154	195	1	4	1,206 50	1,248 00
Grattan.....	Kent.....	80	2,000	670 00	45 00	29 44	768 41	.....	84	180	1	2	405 00	285 00
Grayling.....	Crawford.....	334	7,000	2,025 00	80 00	34 03	4,266 87	3,300 00	243	200	1	4	800 00	1,225 00
Greenland.....	Ontonagon.....	61	600	1,050 00	70 00	35 00	1,297 28	.....	49	200	1	1	700 00	350 00
Greenville.....	Montcalm.....	871	40,000	8,040 00	97 50	35 82	10,185 73	.....	889	200	2	17	1,950 00	6,090 00
Grindstone City.....	Huron.....	274	2,000	1,250 00	65 00	30 00	1,512 66	500 00	271	200	1	2	650 00	600 00
Grosse Isle.....	Wayne.....	196	2,000	1,250 00	55 00	22 67	1,553 33	.....	100	200	1	3	550 00	800 00
Hadley.....	Lapeer.....	112	2,500	920 00	50 00	24 71	1,085 06	.....	127	196	1	2	500 00	420 00
Hamilton.....	Allegan.....	100	1,800	520 00	40 00	25 00	1,021 30	.....	95	180	2	1	320 00	200 00
Hamtramck.....	Wayne.....	348	5,000	947 25	54 72	40 00	1,843 16	3,700 00	162	200	1	1	547 25	400 00
Hamtramck Tp. No. 8.....	Wayne.....	152	1,000	726 00	51 25	29 89	948 63	.....	99	200	1	2	807 50	418 50
Hancock.....	Houghton.....	1,183	26,000	8,606 75	98 67	46 74	15,332 54	11,000 00	787	196	3	13	2,320 00	4,486 75
Hanover.....	Jackson.....	163	8,000	1,900 00	85 00	35 00	2,307 69	.....	153	196	1	3	850 00	1,050 00
Harbor Springs.....	Emmet.....	330	4,000	1,514 00	72 22	32 00	1,971 70	525 00	213	180	1	3	650 00	864 00
Harrison.....	Clare.....	243	3,300	1,700 00	70 00	33 33	2,035 25	.....	215	196	1	4	700 00	1,000 00

GRADED SCHOOL STATISTICS.

Harriaville.....	Alcona.....	303	4,000	1,285 00	50 00	34 88	2,515 78	730 00	285	200	2	3	700 00	585 00
Hart.....	Oceana.....	244	3,000	1,700 00	77 78	37 04	2,118 98	.....	215	180	1	3	700 00	1,000 00
Hartford.....	Van Buren.....	331	4,000	1,924 00	77 78	34 00	2,892 88	.....	805	178	1	4	700 00	1,224 00
Hartland.....	Livingston.....	99	3,000	750 00	45 00	30 00	901 08	.....	90	200	1	1	450 00	300 00
Hastings.....	Barry.....	809	40,000	5,024 00	65 00	33 85	9,145 27	11,500 00	712	198	2	11	1,800 00	3,724 00
Hersey.....	Osceola.....	156	3,500	1,300 00	70 00	30 00	1,892 15	483 00	162	196	1	2	700 00	600 00
Hesperia.....	Newaygo.....	273	4,000	1,454 50	49 03	33 50	1,873 94	.....	242	180	2	3	784 50	670 00
Highland Station.....	Oakland.....	142	1,500	700 00	45 00	25 00	909 38	.....	125	195	1	1	450 00	250 00
Hillman.....	Montmorency.....	98	800	400 00	40 00	22 50	401 60	309 90	84	200	1	1	400 00	157 50
Hillsdale.....	Hillsdale.....	1,124	51,000	7,319 00	73 00	39 14	16,417 19	8,500 00	886	190	3	15	2,044 00	5,275 00
Holland.....	Ottawa.....	1,290	26,000	5,930 00	56 50	32 00	9,858 47	17,000 00	955	185	2	15	1,130 00	4,800 00
Holland Tp. No. 1 fl.....	Ottawa.....	144	800	500 00	50 00	.....	736 63	.....	95	200	1	.....	500 00	.....
Holly.....	Oakland.....	386	15,000	3,100 00	100 00	35 00	4,334 44	1,500 00	266	200	1	6	1,000 00	2,100 00
Holt.....	Ingham.....	132	2,000	624 00	48 00	30 00	1,096 20	.....	102	156	1	1	384 00	240 00
Homer.....	Calhoun.....	312	8,500	2,250 00	52 63	32 89	3,086 40	.....	299	190	3	4	1,000 00	1,250 00
Horton.....	Jackson.....	95	2,500	918 00	50 00	26 00	1,167 55	.....	74	175	1	3	450 00	468 00
Houghton, No. 1.....	Houghton.....	1,080	40,000	7,690 00	139 17	47 78	15,382 37	.....	490	300	2	13	1,670 00	6,020 00
Houghton, No. 2.....	Houghton.....	165	8,000	1,600 00	.....	53 83	5,529 03	3,664 24	79	200	.....	4	.....	1,900 00
Howard City.....	Montcalm.....	367	3,500	1,996 25	70 00	32 40	3,004 86	1,000 00	293	200	1	6	700 00	1,296 25
Howell.....	Livingston.....	723	30,000	4,950 00	105 00	32 50	13,576 66	3,000 00	599	200	1	12	1,050 00	3,900 00
Hubbardston.....	Ionla.....	170	4,500	1,140 00	66 67	30 00	1,340 39	.....	136	180	1	2	600 00	540 00
Hudson.....	Lenawee.....	405	12,000	3,482 50	100 00	33 10	4,908 85	4,800 00	397	187	1	8	1,000 00	2,482 50
Hudson Tp. No. 5.....	Lenawee.....	243	3,500	1,764 00	100 00	32 00	2,239 08	.....	197	180	1	3	900 00	864 00
Humboldt.....	Marquette.....	156	3,000	980 00	75 00	40 00	1,604 79	.....	105	180	1	1	750 00	240 00
Imlay City.....	Lapeer.....	554	15,000	3,180 00	78 46	29 37	5,789 52	7,500 00	422	209	2	9	1,010 00	2,170 00
Ionla.....	Ionla.....	1,349	56,000	12,097 00	77 50	42 80	20,923 66	.....	1,057	194	4	21	3,100 00	8,987 01
Iron Mountain.....	Menominee.....	1,424	25,000	7,933 25	120 00	46 44	29,098 34	14,752 05	1,010	200	1	16	1,300 00	6,733 25
Iron River.....	Iron.....	255	4,000	1,650 00	75 00	45 00	2,559 45	1,100 00	250	200	1	2	750 00	900 00

TABLE XVIII.—Continued.

Districts.	Counties.	No. of children between 5 and 20 years.	Estimated valuation of school property.	Amount paid for salaries and instruction.	Average monthly wages to teachers.		Total expenditures.	Total indebtedness.	No. of children that attended school during the year.	No. of days of school.	No. of teachers employed.		Total wages of teachers for the year.	
					Men.	Women.					Men.	Women.	Men.	Women.
Ironton	Charlevoix.....	168	\$3,000	\$630 00	\$40 00	\$30 00	\$1,014 54	.....	122	178	1	1	\$380 00	\$270 00
Ironwood.....	Gogebic.....	1,195	25,000	6,675 50	105 00	50 84	23,587 28	\$19,000 00	850	200	2	11	2,100 00	4,575 50
Ishpeming	Marquette.....	2,564	57,000	11,740 00	200 00	48 70	21,550 98	23,500 00	1,682	196	1	20	2,000 00	9,740 00
Ishpeming Tp. No. 1.....	Marquette.....	111	1,200	1,000 00	.....	50 00	1,247 24	.....	92	200	.....	2	.....	1,000 00
Ithaca.....	Gratiot.....	547	25,000	4,310 00	110 00	38 07	10,880 46	19,500 00	524	200	1	10	1,100 00	3,310 00
Jackson, No. 1.....	Jackson.....	2,867	150,000	23,410 58	157 50	49 42	35,782 30	12,000 00	2,054	200	2	43	3,150 00	20,260 58
Jackson, No. 17.....	Jackson.....	2,627	55,000	9,258 85	94 00	38 84	13,108 66	.....	1,426	195	2	20	1,880 00	7,378 85
Jamestown	Ottawa.....	130	3,000	675 00	50 00	25 00	1,425 72	1,000 00	88	176	1	1	450 00	225 00
Jasper.....	Lenawee.....	117	3,000	513 00	.....	28 50	873 41	.....	90	179	.....	2	.....	513 00
Jennings.....	Missaukee.....	116	800	720 00	50 00	30 00	849 30	.....	99	180	1	2	450 00	270 00
Jonesville	Hillsdale.....	468	40,000	2,980 00	110 00	37 60	4,028 63	.....	310	200	1	5	1,100 00	1,880 00
Kalamazoo	Kalamazoo	5,454	200,000	27,479 50	170 00	39 47	44,393 64	9,000 00	3,133	200	2	61	3,400 00	24,079 50
Kalamo.....	Eaton.....	118	200	475 00	34 00	22 50	517 38	.....	101	180	2	2	340 00	135 00
Kalkaska	Kalkaska	349	9,000	2,450 00	90 00	31 00	5,080 34	4,000 00	335	200	1	5	900 00	1,550 00
Kendall.....	Van Buren.....	89	1,500	598 00	39 80	28 57	634 40	.....	83	200	2	1	398 00	200 00
Kent City	Kent.....	155	1,100	765 00	48 50	28 00	821 72	.....	121	200	1	1	485 00	280 00
Kingsley.....	Gd. Traverse	155	1,200	755 00	47 78	38 11	1,104 56	.....	120	178	2	1	430 00	325 00
Kingston.....	Tuscola.....	124	1,200	495 00	.....	27 50	956 09	.....	122	180	.....	2	.....	495 00
Laingsburg.....	Shiawassee	197	5,000	1,600 00	65 00	31 67	2,119 90	.....	202	200	1	3	650 00	950 00
Lake City.....	Missaukee.....	154	700	808 25	50 00	30 62	1,582 81	.....	98	200	1	1	500 00	346 25

GRADED SCHOOL STATISTICS.

Lake Linden.....	Houghton.....	1,777	18,000	8,038 50	140 00	42 97	20,023 11	.....	970	106	1	18	1,400 00	7,288 50
Lake Odessa.....	Ionia.....	252	8,000	611 25	56 04	25 00	7,266 59	7,039 01	184	180	2	8	826 25	275 00
Lakeview.....	Montcalm.....	815	8,000	1,845 00	80 00	31 25	2,230 03	.....	251	180	1	4	720 00	1,125 00
Lamont.....	Ottawa.....	83	1,800	480 00	.....	33 07	569 17	.....	46	178	.....	3	.....	430 00
L'Anse.....	Baraga.....	346	10,000	2,240 00	80 00	40 00	3,668 69	.....	239	200	1	4	640 00	1,000 00
Lansing.....	Ingham.....	8,359	120,000	19,867 45	109 17	41 48	44,714 80	48,000 00	2,800	200	3	40	8,275 00	16,592 42
Lapeer.....	Lapeer.....	836	26,000	6,046 50	92 00	30 05	8,971 41	.....	720	200	2	15	1,840 00	4,206 50
Lawrence.....	Van Buren.....	188	9,000	1,640 00	77 78	34 81	1,916 69	.....	164	176	1	8	700 00	940 00
Lawton.....	Van Buren.....	224	12,000	1,519 00	70 00	27 30	1,919 37	.....	231	190	1	4	700 00	819 00
Lealie.....	Ingham.....	357	5,000	2,400 00	80 00	32 00	2,885 72	.....	340	200	1	5	800 00	1,600 00
Lexington.....	Sanilac.....	262	3,000	1,850 00	80 00	26 25	2,207 82	.....	194	200	1	4	800 00	1,050 00
Leroy.....	Osceola.....	220	1,500	1,035 00	45 83	32 00	1,203 48	.....	157	180	2	2	555 00	480 00
Linden.....	Genesee.....	165	5,000	900 00	50 00	25 00	1,188 82	.....	120	180	1	2	450 00	450 00
Lisbon.....	Ottawa.....	102	1,800	810 00	60 00	30 00	962 36	.....	76	180	1	1	540 00	270 00
Litchfield.....	Hillsdale.....	200	9,000	1,521 00	70 00	32 63	2,021 23	8,000 00	174	176	1	8	680 00	891 00
Lowell.....	Kent.....	721	13,500	3,660 00	185 00	32 25	5,487 60	.....	534	200	2	8	1,080 00	2,580 00
Ludington.....	Mason.....	2,316	85,000	14,287 75	90 00	42 91	48,386 94	44,793 91	1,756	200	2	31	1,800 00	12,487 75
Luther.....	Lake.....	470	8,000	2,300 00	80 00	37 50	3,765 49	.....	300	197	1	5	800 00	1,500 00
Lyons.....	Ionia.....	183	2,500	1,568 00	72 22	34 00	1,732 82	.....	180	180	1	3	650 00	918 00
McBrides.....	Montcalm.....	203	2,000	1,140 00	48 33	30 00	1,355 84	.....	173	180	2	1	870 00	270 00
Mackinac City.....	Cheboygan.....	112	3,000	675 00	.....	37 50	1,238 18	848 00	87	175	.....	2	.....	675 00
Mackinac Island.....	Mackinac.....	203	2,500	1,050 00	70 00	35 00	1,633 79	.....	158	160	1	2	490 00	560 00
Mancelona.....	Antrim.....	398	8,000	2,250 00	80 00	28 33	3,633 30	1,500 00	397	180	1	6	720 00	1,530 00
Manchester.....	Washtenaw.....	425	25,000	3,180 00	90 00	32 59	4,360 38	.....	385	200	1	7	900 00	2,280 00
Manistee.....	Manistee.....	3,878	88,000	20,591 75	103 37	42 20	36,074 56	29,000 00	2,115	197	6	39	4,135 00	16,456 75
Manistique.....	Schoolcraft.....	319	5,000	3,600 00	100 00	50 00	5,144 92	.....	440	176	1	6	900 00	2,700 00
Manton.....	Wexford.....	287	9,000	1,685 00	65 00	34 50	3,257 45	7,800 00	208	200	1	4	650 00	1,035 00
Maple Rapids.....	Clinton.....	208	3,000	1,337 00	38 39	29 36	1,610 80	.....	180	200	3	4	691 00	646 00

SUPERINTENDENT'S REPORT.

TABLE XVIII.—Continued.

Districts.	Counties.	No. of children between 5 and 20 years.	Estimated valuation of school property.	Amount paid for salaries and instruction.	Average monthly wages to teachers.		Total expenditures.	Total indebtedness.	No. of children that attended school during the year.	No. of days of school.	No. of teachers employed.		Total wages of teachers during the year.	
					Men.	Women.					Men.	Women.	Men.	Women.
Marcellus.....	Cass.....	223	\$7,500	\$1,410 00	\$45 00	\$33 83	\$2,803 31	\$900 00	160	176	2	2	\$810 00	\$600 00
Marine City.....	St. Clair.....	972	15,000	2,700 00	100 00	28 57	5,813 16	85 00	465	180	1	7	900 00	1,800 00
Marlette.....	Sanilac.....	271	4,000	1,560 00	70 00	28 67	2,069 86	.....	241	200	1	3	700 00	860 00
Marquette.....	Marquette.....	2,486	60,000	13,115 00	70 50	53 20	22,315 51	41,087 50	1,431	200	2	22	1,410 00	11,705 00
Marshall.....	Calhoun.....	1,190	100,000	8,925 00	93 33	34 87	13,879 75	.....	797	196	3	20	2,950 00	6,975 00
Martin.....	Allegan.....	126	5,000	682 00	58 57	32 00	5,264 56	3,643 70	95	140	2	1	410 00	192 00
Marysville.....	St. Clair.....	121	250	615 00	.....	34 17	823 66	.....	95	177	.....	2	.....	615 00
Mason.....	Ingham.....	451	18,000	4,354 00	100 00	36 27	6,002 46	.....	526	195	1	10	1,000 00	3,346 00
Mattawan.....	Van Buren.....	100	3,000	537 50	45 00	26 50	679 63	.....	71	130	1	1	405 00	132 50
May.....	Tuscola.....	247	8,000	1,100 00	55 00	27 50	1,885 48	7,600 00	175	200	1	2	550 00	650 00
Mears.....	Oceana.....	125	1,400	570 00	45 00	30 00	911 71	150 00	86	160	1	2	270 00	300 00
Mecosta.....	Mecosta.....	238	3,000	1,035 50	42 50	30 06	1,302 70	.....	180	180	2	2	765 00	270 50
Memphis.....	Macomb.....	246	4,000	1,125 75	36 57	28 00	1,470 97	.....	177	200	2	2	565 75	580 00
Mendon.....	St. Joseph.....	311	1,200	1,975 00	48 68	37 50	2,476 30	.....	231	190	2	3	925 00	1,050 00
Menominee.....	Menominee.....	2,520	47,000	12,829 26	140 00	49 69	24,317 63	6,000 00	1,428	195	1	25	1,400 00	11,429 26
Metamora.....	Lapeer.....	168	3,500	943 00	52 78	26 00	1,148 03	.....	152	175	1	2	475 00	468 00
Michigamme.....	Marquette.....	382	7,000	2,450 00	67 50	26 67	7,388 86	2,500 00	306	190	2	3	1,350 00	1,100 00
Middleville.....	Barry.....	228	12,000	1,650 00	70 00	31 67	2,277 09	.....	202	200	1	4	700 00	950 00
Midland No. 3.....	Midland.....	701	38,000	5,397 75	110 00	39 07	10,468 33	10,000 00	450	198	1	11	1,100 00	4,297 75
Midland No. 6.....	Midland.....	128	2,000	580 00	.....	35 00	782 20	.....	108	160	.....	2	.....	580 00

GRADED SCHOOL STATISTICS.

Milan	Washtenaw	283	3,500	1,028 11	77 78	23 06	1,887 90	.....	216	180	1	6	700 00	838 11
Millford	Oakland	383	10,000	2,499 20	00 00	26 65	4,645 30	7,000 00	306	186	1	7	900 00	1,599 20
Millburg	Berrien	112	2,500	596 00	00 00	25 00	762 99	.....	98	140	1	1	420 00	175 00
Millington	Tuscola	213	6,500	1,450 00	65 00	26 67	2,538 81	4,500 00	181	200	1	4	650 00	800 00
Minden City	Hanillac	190	1,500	680 00	37 78	.....	1,559 72	.....	164	180	3	.....	680 00	.....
Montague	Muskegon	640	20,000	8,810 18	75 00	28 50	7,728 98	.....	348	200	2	7	1,500 00	2,310 18
Monroe	Monroe	2,009	32,000	5,300 00	120 00	34 17	10,005 57	7,000 00	606	194	1	12	1,200 00	4,100 00
Morenci	Lenawee	321	12,000	2,708 69	83 33	31 67	3,223 69	.....	280	180	1	6	750 00	1,710 00
Morrice	Shlawassee	152	4,000	1,210 00	65 00	28 00	2,176 64	2,500 00	140	195	1	2	650 00	560 00
Morley	Mecosta	216	16,000	1,262 50	60 00	34 57	2,258 49	450 00	175	200	1	2	600 00	662 50
Moscow	Hillsdale	67	1,000	675 00	50 00	25 00	728 48	.....	60	180	1	1	450 00	225 00
Mt. Clemens	Macomb	1,500	35,000	5,576 25	80 00	32 59	7,443 59	.....	783	200	2	14	1,600 00	3,976 25
Mt. Morris	Genesee	164	2,000	657 00	45 00	28 00	825 21	.....	116	176	1	1	405 00	252 00
Mt. Pleasant	Isabella	800	18,000	4,469 65	100 00	26 05	6,530 72	10,000 00	629	200	1	10	1,000 00	3,469 65
Muir	Ionia	166	7,200	1,420 00	77 78	26 67	2,316 82	.....	181	176	1	3	700 00	720 00
Muskegon	Muskegon	7,781	227,000	44,085 00	76 05	45 60	75,958 91	29,600 00	4,911	197	7	85	5,323 75	88,761 25
Napoleon	Jackson	110	4,000	1,305 00	60 00	32 05	1,604 20	7 00	107	187	1	8	600 00	705 00
Nashville	Barry	306	12,000	2,500 00	88 00	32 80	6,218 27	1,500 00	320	200	1	6	800 00	1,640 00
National Mine	Marquette	282	5,000	1,837 50	68 31	47 12	4,333 57	.....	154	196	2	2	1,366 25	471 25
Negaunee	Marquette	2,181	45,000	8,973 10	122 85	47 41	14,153 97	25,500 00	928	192	2	16	1,720 00	7,253 10
Newaygo	Newaygo	403	5,000	2,353 00	90 00	36 33	4,195 81	.....	251	200	1	4	900 00	1,453 00
New Baltimore	Macomb	296	22,000	1,160 00	60 00	28 00	1,812 15	.....	139	200	1	2	600 00	560 00
New Buffalo	Berrien	227	4,000	1,122 50	.....	32 07	1,444 99	.....	172	180	.....	4	.....	1,122 50
Newberry	Luce	288	5,000	1,650 00	75 00	45 00	2,622 33	8,000 00	208	200	1	2	750 00	900 00
New Haven	Macomb	244	1,800	1,017 00	60 00	26 50	1,843 32	.....	152	180	1	2	540 00	477 00
New Holland	Ottawa	184	800	623 75	50 00	13 75	745 47	.....	115	200	1	1	500 00	123 75
New Hudson	Oakland	56	5,000	525 00	45 00	20 00	620 47	.....	59	180	1	1	405 00	120 00
New Troy	Berrien	141	4,000	600 00	70 00	25 00	788 41	.....	115	200	1	1	350 00	250 00

TABLE XVIII.—Continued.

Districts.	Counties.	No. of children between 5 and 20 years.	Estimated valuation of school property.	Amount paid for superintendence and instruction.	Average monthly wages to teachers.		Total expenditures.	Total indebtedness.	No. of children that attended school during the year.	No. of days of school.	No. of teachers employed.		Total wages of teachers for the year.	
					Men.	Women.					Men.	Women.	Men.	Women.
Niles.....	Berrien.....	1,228	\$53,050	\$9,509 25	\$125 79	\$37 15	\$13,848 25	.....	893	185	2	20	\$2,450 00	\$7,059 25
North Adams.....	Hillsdale.....	168	10,000	1,485 00	70 00	31 67	2,134 53	.....	150	180	1	3	630 00	865 00
North Branch.....	Lapeer.....	278	10,000	1,550 00	65 00	30 00	6,131 48	\$6,500 00	213	200	1	3	650 00	900 00
North Muskegon.....	Muskegon.....	889	15,000	2,932 50	67 50	35 97	14,661 27	6,300 00	462	200	2	8	1,350 00	1,582 50
Northport.....	Leelanaw.....	215	2,000	980 00	50 00	30 00	1,192 89	.....	152	180	1	2	450 00	540 00
Northville.....	Wayne.....	399	18,000	2,632 00	80 00	27 61	7,057 19	3,000 00	276	200	1	7	900 00	1,822 00
Norway.....	Menominee.....	648	5,000	4,256 75	90 00	45 98	6,141 61	.....	551	200	1	10	900 00	3,356 75
Nunica.....	Ottawa.....	140	3,000	576 00	43 29	26 25	704 50	.....	95	190	2	2	259 75	316 25
Okemos.....	Ingham.....	146	2,500	645 00	43 89	27 78	743 95	.....	184	180	1	1	385 00	250 00
Olivet.....	Eaton.....	260	6,500	1,357 20	61 67	30 85	2,913 80	2,600 00	215	180	1	4	555 00	902 20
Omer.....	Arenac.....	94	1,400	570 00	.....	35 63	696 06	600 00	84	180	.....	2	.....	570 00
Onekama.....	Manistee.....	189	2,000	690 00	.....	38 38	1,314 20	600 00	147	180	.....	3	.....	690 00
Onondaga.....	Ingham.....	124	1,000	630 00	45 00	25 00	727 26	.....	81	177	1	1	405 00	225 00
Ontonagon.....	Ontonagon.....	348	5,000	3,100 00	125 00	52 50	4,644 18	.....	152	160	1	5	1,000 00	2,100 00
Opeche.....	Houghton.....	795	.....	5,250 00	78 23	41 43	8,535 14	.....	494	200	3	8	2,350 00	2,900 00
Orion.....	Oakland.....	200	3,500	1,014 00	50 00	25 70	1,254 21	.....	149	200	1	2	500 00	514 00
Ortonville.....	Oakland.....	119	3,000	820 00	60 00	22 00	1,145 43	.....	111	198	1	1	600 00	220 00
Oscoda.....	Iosco.....	940	8,000	4,583 25	90 00	35 08	7,768 21	1,827 03	500	200	1	12	900 00	3,683 25
Osseo.....	Hillsdale.....	105	3,000	531 00	40 00	19 00	614 83	.....	104	180	1	1	360 00	171 00
Otisville.....	Genesee.....	193	2,000	890 00	45 00	22 00	1,201 02	215 00	164	198	1	2	450 00	440 00

GRADED SCHOOL STATISTICS.

Otsego.....	457	10,000	2,804 00	105 55	24 33	4,333 56	.....	385	180	1	6	950 00	1,854 00
Otter Lake.....	139	1,200	711 00	55 00	24 00	814 68	.....	87	180	1	1	495 00	216 00
Overisel.....	188	2,000	446 00	.....	27 87	547 68	.....	102	200	.....	2	.....	446 00
Ovid.....	417	20,000	3,232 50	100 00	31 89	4,897 96	.....	965	200	1	8	1,000 00	2,232 50
Owosso.....	1,707	80,000	11,924 50	71 87	38 35	17,686 77	5,000 00	1,300	192	5	23	8,450 00	8,474 50
Oxford.....	331	14,000	1,976 87	76 87	29 20	5,354 83	7,000 00	290	200	2	5	691 87	1,285 00
Palmyra.....	142	3,000	630 00	24 31	25 00	812 68	.....	100	177	2	1	617 50	12 50
Palo.....	91	4,600	980 00	41 76	25 00	1,085 48	.....	65	200	2	1	710 00	250 00
Paris.....	115	1,200	720 00	50 00	30 00	880 31	.....	96	180	1	1	450 00	270 00
Paris Tp. No. 1.....	95	1,000	807 00	60 00	29 57	1,289 86	225 00	116	200	1	1	600 00	207 00
Parma.....	195	15,000	1,856 00	80 00	22 00	3,084 53	.....	220	200	1	4	800 00	1,056 00
Paw Paw.....	351	40,000	3,880 00	100 00	36 00	7,710 08	.....	340	200	1	8	1,000 00	2,880 00
Peck.....	177	800	700 00	50 00	20 00	786 02	.....	106	198	1	1	500 00	200 00
Pentwater.....	498	10,000	2,670 00	100 00	33 40	3,293 70	.....	409	200	1	7	1,000 00	1,670 00
Pequaming.....	152	.....	1,100 00	.....	55 00	1,306 62	.....	85	200	.....	2	.....	1,100 00
Perry.....	163	4,000	1,295 00	70 00	29 75	1,484 32	.....	160	200	1	3	700 00	595 00
Petoskey.....	808	7,500	4,930 00	110 00	34 82	6,678 58	3,500 00	526	200	1	11	1,100 00	3,830 00
Petersburg.....	186	9,000	1,170 00	50 00	26 67	1,393 94	.....	160	176	1	3	450 00	720 00
Pewamo.....	127	1,600	1,042 50	61 67	30 47	1,325 99	.....	93	185	1	2	555 00	487 50
Plne Run.....	83	1,000	480 00	.....	30 00	544 85	.....	50	160	.....	2	.....	480 00
Plerson.....	164	2,000	675 00	45 00	30 00	824 01	.....	97	180	1	1	405 00	270 00
Pinckney.....	198	10,000	1,580 00	50 00	29 00	3,071 55	6,000 00	210	200	2	2	1,000 00	580 00
Pinconning.....	373	4,500	1,527 50	70 00	29 55	2,595 58	1,000 00	235	200	1	3	700 00	827 50
Pinnebog.....	203	1,800	750 00	55 00	20 00	901 81	.....	142	200	1	1	550 00	200 00
Pittsford.....	115	2,500	625 00	44 44	25 00	760 61	.....	104	180	1	1	400 00	225 00
Plainwell.....	429	16,000	3,021 00	100 00	33 67	3,906 98	116 10	382	176	1	7	900 00	2,121 00
Plymouth.....	413	15,000	3,100 00	100 00	35 00	5,482 88	3,000 00	325	200	1	6	1,000 00	2,100 00
Pontiac.....	1,248	84,000	11,650 00	98 75	38 50	17,788 65	.....	1,112	200	4	20	3,950 00	7,700 00

SUPERINTENDENT'S REPORT.

TABLE XVIII.—Continued.

Districts.	Counties.	No. of children between 5 and 20 years.	Estimated valuation of school property.	Amount paid for and pertinence and instruction.	Average monthly wages to teachers.		Total expenditures.	No. of children that attended school during the year.	No. of days of school.	No. of teachers employed.		Total wages of teachers for the year.	
					Men.	Women.				Men.	Women.	Men.	Women.
Port Austin.....	Huron.....	305	\$4,000	\$1,300 00	\$70 00	\$30 00	\$1,765 48	160	200	1	2	\$700 00	\$800 00
Port Crescent.....	Huron.....	97	3,500	600 00	45 00	25 00	734 35	88	200	1	1	450 00	150 00
Port Hope	Huron	256	1,500	900 00	60 00	30 00	1,107 92	131	200	1	1	600 00	300 00
Port Huron.....	St. Clair	4,374	102,900	17,132 00	125 00	38 58	24,407 58	2,151	200	2	36	2,500 00	13,889 00
Portland.....	Ionia.....	439	16,000	3,850 00	.....	40 53	5,831 87	458	190	.....	10	.....	3,850 00
Port Sanilac.....	Sanilac.....	230	2,000	983 25	60 00	25 18	1,296 49	208	180	1	2	540 00	453 25
Potterville.....	Eaton.....	212	4,000	990 00	40 00	30 00	1,198 25	166	180	2	1	720 00	270 00
Powers.....	Menominee.....	222	2,800	950 00	60 00	35 00	1,935 91	115	198	1	1	600 00	350 00
Quinneeseo	Menominee.....	146	3,000	1,150 00	75 00	40 00	1,965 25	124	200	1	1	750 00	400 00
Quincy.....	Branch.....	307	10,000	2,920 00	90 00	33 67	4,028 36	300	200	1	6	900 00	2,020 00
Quincy Tp. No. 1	Houghton.....	512	.....	2,350 00	100 00	45 00	3,714 38	241	196	1	3	1,000 00	1,350 00
Ravenna.....	Muskegon	137	2,000	765 00	50 00	35 00	1,105 71	101	180	2	1	450 00	315 00
Reading.....	Hilldale.....	255	8,000	1,997 00	88 89	33 25	3,664 20	195	180	1	5	800 00	1,197 00
Reed City.....	Osceola	650	8,000	3,391 25	55 00	38 02	4,691 81	510	200	3	6	1,650 00	1,741 25
Reese.....	Tuscola	219	2,000	850 00	50 00	35 00	1,101 87	164	200	1	1	500 00	350 00
Republic.....	Marquette.....	741	15,000	5,350 00	140 00	49 37	12,454 71	589	197	1	8	1,400 00	3,950 00
Richland.....	Kalamazoo	115	5,500	1,425 00	80 00	.....	2,235 32	129	196	1	.....	800 00	.....
Richmond	Macomb	221	8,000	1,422 00	75 00	27 67	2,367 02	196	177	1	3	675 00	747 00
Ridgeway.....	Lenawee.....	83	2,500	640 00	50 00	21 11	852 69	60	180	1	2	450 00	190 00
Riley Center.....	St. Clair	92	1,300	387 00	21 50	507 80	70	180	2	387 00

GRADED SCHOOL STATISTICS.

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Rochester.....	Oakland.....	801	7,000	1,733 00	77 50	123 00	2,500 17	8,000 00	304	195	1	3	775 00	960 00
Rockford.....	Kent.....	246	20,000	1,800 00	60 00	80 00	3,861 72	5,000 00	206	200	2	2	1,200 00	000 00
Rockland.....	Ontonagon.....	307	3,000	2,900 00	82 50	41 57	4,068 85	.....	166	195	2	3	1,650 00	1,250 00
Rogers City.....	Presque Isle.....	263	3,000	1,042 25	37 82	81 57	2,279 27	5,000 00	225	160	4	2	567 25	475 00
Romeo.....	Macomb.....	523	25,000	4,000 00	153 00	38 43	10,001 81	.....	574	108	1	7	1,500 00	2,500 00
Roscommon.....	Roscommon.....	175	1,200	960 00	.....	41 74	1,235 11	.....	120	160	.....	3	.....	960 00
Royal Oak.....	Oakland.....	172	2,500	636 90	51 77	27 76	822 80	.....	117	200	1	1	359 30	277 60
Saginaw.....	Saginaw.....	5,661	163,796	23,155 11	167 50	39 41	59,857 26	42,000 00	3,081	200	6	50	6,450 00	19,705 11
St. Charles.....	Saginaw.....	279	7,000	1,800 00	75 00	35 00	3,202 97	1,000 00	250	200	1	3	750 00	1,050 00
St. Clair.....	St. Clair.....	767	35,000	5,100 00	72 50	33 18	10,929 24	8,752 00	618	200	2	11	1,450 00	3,650 00
St. Helen.....	Roscommon.....	162	1,200	800 00	50 00	30 00	883 10	.....	103	200	1	1	500 00	300 00
St. Ignace.....	Mackinac.....	769	23,000	8,863 37	51 44	36 24	21,478 87	17,900 00	409	196	3	7	1,471 75	2,391 62
St. Johns.....	Clinton.....	1,027	39,000	6,428 00	120 00	37 34	12,236 94	17,600 00	737	200	1	14	1,200 00	5,228 00
St. Joseph.....	Berrien.....	1,251	45,000	6,383 50	78 61	38 52	13,067 86	6,000 00	818	185	2	14	1,415 00	4,968 50
St. Louis.....	Gratiot.....	701	12,000	4,700 00	70 75	32 85	7,664 50	4,000 00	422	196	2	15	1,415 00	3,285 00
Salem.....	Washtenaw.....	107	1,200	523 75	40 00	18 19	932 51	350 00	91	180	1	2	360 00	163 75
Saline.....	Washtenaw.....	279	25,000	2,580 00	90 00	33 60	3,271 01	.....	248	200	1	5	900 00	1,680 00
Sand Beach.....	Huron.....	425	5,500	1,975 00	65 00	33 00	2,786 71	1,050 00	284	200	1	4	650 00	1,325 00
Sand Lake.....	Kent.....	181	2,500	900 00	50 00	25 00	1,438 00	.....	165	180	1	2	450 00	450 00
Sanilac Tp. No. 2.....	Sanilac.....	105	1,500	472 00	40 00	18 00	561 89	.....	75	200	1	1	400 00	72 00
Saranac.....	Ionia.....	256	13,000	1,901 63	56 08	31 01	2,422 86	.....	256	196	2	6	785 15	1,116 50
Sangatuck.....	Allegan.....	371	7,500	1,694 00	72 22	29 00	2,236 45	.....	300	180	1	4	650 00	1,044 00
Sault Ste. Marie.....	Chippewa.....	1,576	37,000	5,934 50	120 00	36 70	13,049 69	3,500 00	977	200	1	14	1,200 00	4,734 50
Schoolcraft.....	Kalamazoo.....	209	24,000	2,632 00	111 11	37 60	3,446 61	.....	275	180	1	5	1,000 00	1,692 00
Sebewaing.....	Huron.....	365	3,500	900 00	45 00	.....	1,053 63	.....	108	200	3	.....	900 00	.....
Shaftsbury.....	Shlawassee.....	87	2,000	541 17	36 82	27 20	894 53	287 76	72	170	2	3	405 00	136 00
Shelby.....	Oceana.....	324	5,000	1,437 00	66 67	81 00	1,923 82	2,000 00	288	175	1	3	600 00	837 00
Shepherd.....	Isabella.....	201	2,200	594 00	48 75	31 50	1,079 60	.....	160	100	2	2	390 00	504 00

TABLE XVIII.—Continued.

Districts.	Counties.	No of children be- tween 5 and 20 years.	Estimated valuation of school property.	Amount paid for su- perintendence and instruction.	Average monthly wages to teachers.		Total expenditures.	Total indebtedness.	No. of children that attended school dur- ing the year.	No. of days of school.	No. of teachers employed.		Total wages of teachers for the year.	
					Men.	Women.					Men.	Women.	Men.	Women.
Sheridan.....	Montcalm.....	152	\$2,000	\$1,170 00	\$90 00	\$35 00	\$1,471 06	-----	108	180	1	2	\$540 00	\$330 00
Sherwood.....	Branch.....	160	2,000	857 00	50 00	25 43	1,129 45	-----	185	180	1	2	450 00	407 00
South Frankfort.....	Benzie.....	160	4,500	1,057 50	55 00	33 09	2,094 67	-----	148	178	1	2	495 00	562 50
South Haven.....	Van Buren.....	525	7,000	1,461 55	79 91	31 60	3,611 78	\$10,000 00	482	190	2	8	719 18	2,180 78
South Lyon.....	Oakland.....	221	4,000	1,385 20	70 00	24 43	2,093 94	16 00	199	188	1	5	700 00	684 00
Sparta Center.....	Kent.....	255	4,000	1,700 00	70 00	33 33	2,003 48	-----	210	200	1	3	700 00	1,000 00
Spring Lake.....	Ottawa.....	686	8,000	3,612 50	100 00	34 37	4,184 34	125 00	584	190	1	8	1,000 00	2,612 50
Springport.....	Jackson.....	135	4,000	1,450 00	70 00	37 50	1,789 14	-----	152	200	1	2	700 00	750 00
Springwells No. 1.....	Wayne.....	508	7,000	1,175 00	65 00	30 88	1,879 46	5,500 00	148	200	1	2	650 00	525 00
Springwells No. 2.....	Wayne.....	436	10,000	1,000 00	60 00	40 00	1,281 22	-----	196	200	1	1	600 00	400 00
Springwells No. 4.....	Wayne.....	606	7,000	682 50	-----	32 50	1,864 63	4,500 00	110	210	-----	2	-----	682 50
Springwells No. 7.....	Wayne.....	275	3,000	725 00	47 50	25 00	1,454 62	1,000 00	154	200	1	1	475 00	250 00
Stambaugh.....	Iron.....	184	3,000	1,100 00	65 00	45 00	1,415 93	700 00	125	200	1	1	650 00	450 00
Standish.....	Arenac.....	218	3,000	760 00	41 00	38 93	1,910 70	700 00	152	200	1	2	205 00	545 00
Stanwood.....	Mecosta.....	111	2,500	535 00	27 78	31 67	1,476 28	800 00	78	180	2	2	250 00	285 00
Stanton.....	Montcalm.....	562	7,500	4,450 00	95 00	35 00	5,878 94	-----	242	200	1	10	950 00	3,500 00
Sterling.....	Arenac.....	178	3,200	600 00	45 00	35 00	1,495 98	2,350 00	189	160	1	2	180 00	420 00
Stockbridge.....	Ingham.....	140	5,236	858 50	58 18	32 23	2,223 21	4,000 00	165	145	1	2	407 25	451 25
Stephenson.....	Menominee.....	295	2,500	1,150 00	70 00	45 00	2,415 92	1,519 97	198	196	1	1	700 00	450 00
Sturgis.....	St. Joseph.....	584	40,000	4,168 50	100 00	33 13	5,705 12	-----	420	188	1	10	1,000 00	8,157 50

GRADED SCHOOL STATISTICS.

Summit City	111	1,000	699 70	40 00	30 00	991 06	.....	84	180	1	1	840 00	270 00
Sumner.....	141	4,000	964 25	60 00	28 63	1,688 18	.....	111	200	1	2	600 00	854 25
Sutton's Bay.....	186	5,000	540 00	50 00	30 00	680 57	.....	103	180	1	1	800 00	240 00
Tawas City.....	513	7,000	2,848 50	80 00	40 00	5,509 07	2,200 00	307	200	1	5	800 00	2,000 00
Tecumseh.....	554	42,000	4,741 25	100 00	81 44	7,925 45	1,532 50	511	200	1	15	1,000 00	3,741 25
Tekonsha.....	184	10,000	1,321 62	70 18	28 75	1,953 84	.....	180	180	2	3	631 62	690 00
Thornville.....	88	1,500	643 50	46 90	25 30	1,180 98	.....	75	180	1	1	418 50	225 00
Three Oaks.....	242	6,000	1,825 00	75 00	35 00	2,534 84	.....	286	180	1	4	675 00	1,260 00
Three Rivers No. 1.....	529	25,000	5,156 60	150 00	26 56	12,991 46	6,000 00	484	200	1	13	1,500 00	3,656 00
Three Rivers No. 4.....	801	7,000	1,980 00	70 00	32 00	3,426 08	626 56	277	200	1	4	700 00	1,280 00
Traverse City.....	1,121	40,000	8,382 50	166 67	45 58	21,088 57	16,000 00	870	180	1	17	1,500 00	6,882 50
Trenton.....	409	2,500	1,200 00	65 00	27 50	1,501 26	.....	275	200	1	2	650 00	550 00
Trufant.....	133	600	418 50	.....	29 89	537 24	.....	121	140	.....	4	.....	418 50
Tuscola.....	151	1,000	700 00	50 00	20 00	809 22	61 75	132	200	1	1	500 00	200 00
Tustin.....	121	1,500	750 00	50 00	25 00	905 83	.....	103	200	1	1	500 00	250 00
Uby	145	2,200	612 00	45 00	23 00	1,023 47	1,400 00	132	180	1	1	380 00	252 00
Union City.....	458	20,000	4,125 00	100 00	34 72	5,494 49	.....	453	200	1	9	1,000 00	3,125 00
Unionville.....	171	1,500	900 00	64 29	32 16	1,304 08	.....	128	140	1	2	450 00	450 00
Utica.....	863	12,000	2,140 00	60 00	21 33	3,096 12	1,398 00	214	200	2	3	1,300 00	940 00
Vandalia.....	150	5,000	1,848 00	50 29	29 00	1,809 08	.....	147	167	2	2	855 00	493 00
Vassar.....	659	24,000	3,740 00	119 00	23 00	6,032 03	1,000 00	487	200	1	8	1,100 00	2,640 00
Vermontville.....	263	10,000	1,523 00	72 22	32 33	3,356 42	.....	241	180	1	3	650 00	873 00
Vernon.....	195	3,000	1,630 00	70 00	30 00	2,335 49	.....	212	200	1	3	700 00	900 00
Vicksburg.....	288	7,500	2,097 00	80 00	20 60	3,023 18	400 00	275	180	1	5	720 00	1,377 00
Vreesland	158	2,650	659 20	48 80	22 00	1,373 27	350 00	100	200	2	1	439 20	220 00
Vulcan.....	174	3,000	1,750 00	80 00	50 00	3,029 05	.....	179	190	1	2	800 00	950 00
Wacousta.....	102	1,200	567 37	39 71	30 00	626 48	.....	80	180	1	1	357 37	210 00

SUPERINTENDENT'S REPORT.

TABLE XVIII.—Continued.

Districts.	Counties.	No. of children between 5 and 20 years.	Estimated valuation of school property.	Amount paid for and per diem for instruction.	Average monthly wages of teachers.		Total expenditures.	Total indebtedness.	No. of children that attended school during the year.	No. of days of school.	No. of teachers employed.		Total wages of teachers for the year.	
					Men.	Women.					Men.	Women.	Men.	Women.
Waldron.....	Hillsdale.....	139	\$2,000	\$580 00	\$40 00	\$30 00	\$386 85	.....	135	156	1	1	\$320 00	\$240 00
Walker Tp. No. 14.....	Kent.....	215	1,500	540 00	.....	30 00	1,208 12	\$500 00	194	180	.....	2	.....	540 00
Warren.....	Macomb.....	129	2,100	540 00	50 00	18 00	849 60	400 00	81	175	1	1	450 00	90 00
Washington.....	Macomb.....	98	1,500	555 00	40 00	35 00	691 26	.....	74	180	1	1	240 00	315 00
Watervliet.....	Berrien.....	157	2,000	716 24	55 55	24 03	834 51	.....	140	178	2	1	499 99	216 25
Watrousville.....	Tuscola.....	105	8,000	570 00	50 00	30 00	2,884 41	2,000 00	100	180	1	1	300 00	270 00
Wayland.....	Allegan.....	151	4,000	1,075 00	60 00	21 40	1,696 20	.....	142	180	1	3	540 00	535 00
Wayne.....	Wayne.....	330	16,000	2,350 00	75 00	33 00	4,334 52	3,000 00	309	200	1	6	750 00	1,650 00
Webberville.....	Ingham.....	210	2,400	941 00	55 55	24 50	1,106 52	.....	147	175	1	3	500 00	441 00
West Bay City.....	Bay.....	3,762	90,000	18,035 00	80 00	36 64	42,115 52	27,000 00	2,996	192	5	41	4,000 00	14,035 00
West Branch.....	Ogemaw.....	395	6,500	1,725 00	77 78	37 96	2,674 59	6,130 00	340	180	1	2	700 00	1,025 00
Wheeler.....	Gratiot.....	113	1,300	466 50	.....	29 16	600 00	1,200 00	104	160	.....	2	.....	466 50
White Cloud.....	Newaygo.....	217	5,000	1,300 00	50 00	30 77	2,282 79	600 00	139	200	1	4	500 00	800 00
Whitehall.....	Muskegon.....	607	30,000	4,000 00	100 00	37 50	5,896 13	.....	487	200	1	8	1,000 00	3,000 00
White Pigeon.....	St. Joseph.....	236	20,000	2,800 00	120 00	32 00	3,138 15	.....	331	200	1	5	1,200 00	1,600 00
White Rock.....	Huron.....	106	2,000	515 00	50 00	29 44	618 23	.....	87	180	1	1	250 00	265 00
Williamston.....	Ingham.....	410	20,000	2,350 00	52 63	32 00	4,262 08	1,500 00	300	200	2	6	942 00	1,408 00
Woodland.....	Barry.....	136	3,500	750 00	37 50	.....	969 93	500 00	105	200	2	.....	750 00	.....
Worth.....	Arenac.....	175	2,000	465 00	.....	31 25	911 36	1,105 00	104	179	.....	5	.....	500 00
Wyandotte.....	Wayne.....	1,423	50,000	4,270 00	100 00	36 33	6,912 23	520	200	1	10	1,000 00	3,270 00

GRADED SCHOOL STATISTICS.

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Yale	Ht. Clair.....	810	11,000	2,100 00	20 00	23 52	4,220 27	7,000 00	843	196	1	4	800 00	1,800 00
Ypsanti.....	Washtenaw ...	1,769	60,000	10,715 00	95 00	38 43	18,135 45	.....	880	200	6	16	4,760 00	5,765 00
Zeeland.....	Ottawa.....	417	5,000	1,410 00	58 00	27 83	2,023 89	.....	819	200	1	8	590 00	890 00
Zillwaukee.....	Saginaw	484	6,000	2,250 00	65 00	31 67	8,001 15	.....	845	200	2	8	1,300 00	960 00
Zutphen.....	Ottawa	135	1,250	485 00	45 00	26 00	598 97	.....	103	155	1	1	880 00	125 00

TABLE XIX.

Financial Statistics of Two Hundred and Eighty-nine Graded Schools as reported by Superintendents and Principals for the School Year 1888-9.

Districts.	Amount paid superintendent or principal.	Amount paid regular teachers.	Amount paid special teachers.	Total amount paid for instruction.	Amount paid for incidentals.	Total cost of schools.	Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
Addison.....	\$675 00	\$450 00	.....	\$1,125 00	\$374 58	\$1,499 58	\$11 60	\$3 86	\$15 46
Adrian.....	1,700 00	12,359 00	\$700 00	14,759 00	5,663 21	20,422 21	14 50	5 56	20 06
Alaska.....	450 00	60 00	.....	510 00	108 81	618 81	7 50	1 60	9 10
Albion.....	1,050 00	4,763 00	125 00	5,938 00	2,850 00	8,788 00	9 65	4 63	14 28
Algonac.....	675 00	900 00	.....	1,575 00	599 33	2,174 33	8 80	3 36	12 16
Allegan.....	1,000 00	4,582 50	63 14	5,645 64	3,823 13	9,468 77	9 62	6 51	16 13
Allouez.....	675 00	680 00	.....	1,355 00	878 20	2,233 20	15 76	10 21	25 97
Alma.....	1,000 00	2,600 00	200 00	3,800 00	943 89	4,743 89	8 64	3 14	10 78
Almont.....	800 00	1,250 00	.....	2,050 00	600 00	2,650 00	9 76	2 66	12 62
Alpena.....	1,600 00	9,411 00	.....	11,011 00	15,845 26	26,856 26	9 84	14 16	24 00
Ann Arbor.....	2,200 00	22,858 50	1,250 00	26,308 50	5,795 00	32,103 50	16 55	8 90	20 45
Atlantic Mine.....	900 00	900 00	.....	1,800 00	2,991 02	4,791 02	10 59	17 59	28 18
Bad Axe.....	650 00	900 00	.....	1,550 00	1,019 10	2,569 10	7 33	4 85	12 18
Baldwin.....	600 00	400 00	.....	1,000 00	262 98	1,262 98	8 85	2 32	11 17
Bangor.....	405 00	225 00	.....	630 00	132 25	762 25	9 40	1 97	11 37
Bath.....	307 50	392 00	.....	699 50	198 75	898 25	5 88	1 67	7 55
Battle Creek.....	1,500 00	14,419 50	.....	15,919 50	6,934 27	22,853 77	11 58	5 05	16 63
Bay City.....	2,000 00	31,849 13	1,600 00	35,409 13	12,213 64	47,622 77	12 09	4 12	16 21
Belding.....	750 00	900 00	.....	1,650 00	622 03	2,272 03	7 89	2 98	10 87
Berlin.....	450 00	270 00	.....	720 00	55 00	775 00	8 18	63	8 81
Berrien Springs.....	600 00	1,080 00	.....	1,680 00	483 00	2,163 00	12 22	3 51	15 73
Big Rapids.....	1,500 00	9,214 50	.....	10,714 50	3,760 26	14,474 76	10 66	3 75	14 41
Birmingham.....	800 00	2,140 00	.....	2,940 00	500 00	3,440 00	10 97	1 87	12 84
Blissfield.....	700 00	680 00	.....	1,380 00	337 94	1,717 94	10 45	2 56	13 01
Boyne City.....	450 00	680 00	.....	1,080 00	336 45	1,466 45	10 49	3 75	14 24
Brighton.....	750 00	1,090 00	.....	1,840 00	507 86	2,347 86	9 53	2 63	12 16
Britton.....	370 00	285 00	.....	655 00	44 13	699 13	8 51	57	9 08
Bronson.....	700 00	900 00	.....	1,600 00	698 96	2,298 96	6 02	2 63	8 65
Brown City.....	500 00	200 00	.....	700 00	300 00	1,000 00	5 38	2 31	7 69
Burr Oak.....	450 00	1,035 00	1,485 00	787 79	2,272 79	9 05	4 80	13 85

FINANCIAL STATISTICS.

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TABLE XIX.—Continued.

Districts.	Amount paid superintendent or principal.	Amount paid regular teachers.	Amount paid special teachers.	Total amount paid for instruction.	Amount paid for incidentals.	Total cost of schools.	Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
Cadillac.....	\$1,400 00	\$7,622 00	\$440 00	\$9,462 00	\$3,758 03	\$13,220 03	\$14 27	\$5 66	\$19 93
Caledonia.....	550 00	260 00	100 00	910 00	30 00	940 00	6 28	20	6 48
Calumet.....	2,150 00	18,933 58	1,200 00	22,283 58	8,180 60	30,464 18	13 16	4 83	17 99
Cannonsburg.....	360 00	180 00	.....	540 00	80 32	620 32	9 00	1 84	10 84
Capac.....	500 00	750 00	.....	1,250 00	1,099 53	2,349 53	7 14	9 71	16 85
Caro.....	800 00	2,764 00	150 00	3,714 00	2,981 38	6,695 38	9 30	7 50	16 80
Carrollton.....	425 00	350 00	.....	775 00	264 31	1,039 31	8 80	3 00	11 80
Carson City.....	800 00	1,800 00	.....	2,600 00	410 00	3,010 00	8 66	1 37	10 03
Carsonville.....	450 00	200 00	.....	650 00	85 51	735 51	6 50	85	7 35
Caseville.....	650 00	736 00	.....	1,386 00	195 16	1,581 16	9 06	1 27	10 33
Cass City.....	675 00	950 00	.....	1,625 00	444 56	2,069 56	7 39	2 02	9 41
Cedar Springs.....	800 00	1,654 00	.....	2,454 00	963 15	3,417 15	10 62	4 17	14 79
Centerville.....	850 00	1,625 00	.....	2,475 00	802 41	3,277 41	18 90	4 51	18 41
Central Mine.....	720 00	810 00	.....	1,530 00	109 08	1,639 08	8 60	61	9 21
Champion.....	1,640 00	4,540 00	.....	6,180 00	6,353 84	12,533 84	13 64	14 03	27 67
Charlevoix.....	950 00	1,395 00	.....	2,345 00	900 00	3,245 00	9 45	3 63	13 08
Charlotte.....	1,400 00	8,824 00	850 75	10,574 75	4,669 19	15,243 94	13 84	6 11	19 95
Cheboygan.....	1,000 00	2,700 00	.....	3,700 00	558 00	4,258 00	13 96	2 10	16 06
Chelsea.....	800 00	2,400 00	.....	3,200 00	1,000 00	4,200 00	10 60	3 32	13 92
Clinton.....	800 00	1,200 00	.....	2,000 00	300 00	2,300 00	9 85	1 48	11 33
Clio.....	575 00	550 00	.....	1,125 00	190 00	1,315 00	6 78	1 14	7 92
Coldwater.....	1,400 00	8,480 00	850 00	10,730 00	3,519 31	14,249 31	12 31	4 03	16 34
Concord.....	700 00	1,056 00	.....	1,756 00	658 00	2,414 00	12 03	4 50	16 53
Constantine.....	1,100 00	2,450 00	.....	3,550 00	249 20	3,799 20	15 64	1 10	16 74
Coopersville.....	540 00	855 00	.....	1,395 00	305 00	1,700 00	8 02	1 75	9 77
Coral.....	500 00	350 00	.....	850 00	170 43	1,020 43	6 25	1 25	7 50
Corunna.....	1,000 00	2,960 00	.....	3,960 00	811 44	4,771 44	10 10	2 07	12 17
Croswell.....	600 00	550 00	.....	1,150 00	221 65	1,371 65	7 93	1 53	9 46
Dansville.....	600 00	798 00	.....	1,398 00	466 98	1,864 98	10 67	3 56	14 23
Davison Station.....	300 00	225 00	.....	525 00	66 15	591 15	3 02	38	3 40
Dearborn.....	600 00	315 00	.....	915 00	100 00	1,015 00	4 60	50	5 10
Deerfield.....	650 00	864 00	.....	1,514 00	204 35	1,718 35	9 17	1 24	10 41
Detroit.....	4,000 00	253,416 58	13,120 25	270,536 83	114,946 00	385,482 83	15 05	6 40	21 45
Dexter.....	1,000 00	1,740 00	.....	2,740 00	650 00	3,390 00	13 11	3 11	16 22
Douglas.....	800 00	627 50	.....	1,427 50	299 50	1,727 00	9 84	2 06	11 90
Dryden.....	650 00	475 00	.....	1,125 00	51 33	1,176 33	8 40	88	8 78

TABLE XIX.—Continued.

Districts.	Amount paid superin- tendent or principal.	Amount paid regular teachers.	Amount paid special teachers.	Total amount paid for instruction.	Amount paid for inci- dentals.	Total cost of schools.	Cost per capita for in- struction.	Cost per capita for in- cidentals.	Total cost per capita.
Dundee.....	\$900 00	\$1,800 00	.....	\$2,700 00	\$1,881 19	\$4,081 19	89 18	\$4 70	\$18 88
East Blissfield.....	600 00	880 00	.....	1,480 00	218 40	1,698 40	8 55	1 26	9 81
East Holland.....	850 00	31 50	.....	881 50	40 00	421 50	.....	.....	.....
East Hudson.....	900 00	864 00	.....	1,764 00	468 58	2,232 58	10 63	2 82	18 45
East Lake.....	750 00	900 00	.....	1,650 00	428 05	2,078 05	10 65	2 75	13 40
East Saginaw.....	2,500 00	45,141 00	\$2,200 00	49,841 00	18,160 47	68,001 47	18 40	4 88	18 28
East Tawas.....	950 00	1,920 00	74 86	2,944 86	987 49	3,931 85	8 84	2 96	11 80
Eaton Rapids.....	900 00	3,160 00	.....	4,060 00	446 55	4,506 55	10 54	1 16	11 70
Ecorse.....	457 50	247 50	.....	705 00	195 56	900 56	5 60	1 55	7 15
Edwardsburg.....	450 00	630 00	.....	1,080 00	819 66	1,899 66	10 19	7 73	17 92
Elk Rapids.....	1,200 00	3,180 00	.....	4,380 00	1,448 72	5,828 72	17 45	5 77	23 22
Elm Hall.....	440 00	224 00	.....	664 00	91 28	755 28	.....	.....	.....
Elsie.....	540 00	747 00	.....	1,287 00	94 07	1,381 07	7 57	55	8 12
Erie.....	450 00	270 00	.....	720 00	110 00	830 00	6 66	1 02	7 68
Escanaba.....	1,200 00	4,408 75	.....	5,608 75	2,688 04	8,296 79	11 68	5 60	17 28
Essexville.....	600 00	1,700 00	.....	2,300 00	1,360 40	3,660 40	8 68	5 13	13 81
Evart.....	1,100 00	1,800 00	.....	2,900 00	386 25	3,286 25	6 37	85	7 22
Farwell.....	585 00	630 00	.....	1,215 00	417 59	1,632 59	10 21	3 51	13 72
Ferrysburg.....	480 00	440 00	.....	920 00	140 00	1,060 00	.....	.....	.....
Filer No. 1.....	550 00	175 00	.....	725 00	670 32	1,395 32	9 06	8 38	17 44
Flint.....	1,500 00	15,237 95	.....	16,737 95	8,051 43	24,789 88	11 79	5 67	17 46
Fort Gratiot.....	1,000 00	2,150 00	.....	3,150 00	453 40	3,603 40	6 44	93	7 37
Fowlerville.....	700 00	1,800 00	.....	2,500 00	350 00	2,850 00	11 41	1 60	13 01
Frankfort.....	800 00	2,450 00	.....	3,250 00	583 17	3,833 17	8 57	1 54	10 11
Franklin No. 1.....	450 00	350 00	.....	800 00	225 45	1,025 45	9 52	2 68	12 20
Franklin No. 2.....	800 00	900 00	.....	1,700 00	1,397 41	3,097 41	15 04	12 37	27 41
Franklin No. 5.....	750 00	890 00	.....	1,640 00	450 00	2,090 00	11 08	3 04	14 12
Fillmore No. 2.....	400 00	300 00	.....	700 00	100 00	800 00	4 66	66	5 32
Galesburg.....	700 00	1,056 00	.....	1,756 00	451 42	2,207 42	10 45	2 69	13 14
Gallen.....	650 00	810 00	.....	1,460 00	316 96	1,776 96	8 54	1 85	10 39
Gaylord.....	475 00	630 00	.....	1,105 00	230 00	1,335 00	.....	.....	.....
Gobleville.....	540 00	495 00	.....	1,035 00	130 00	1,165 00	10 35	1 30	11 65
Graafschap.....	860 00	200 00	.....	560 00	85 70	645 70	8 00	1 22	9 22
Grand Haven.....	1,200 00	8,960 00	.....	10,160 00	7,520 99	17,680 99	10 21	7 56	17 77
Grand Ledge.....	777 77	960 00	.....	1,737 77	516 31	2,254 08	.....	.....	.....

TABLE XIX.—Continued.

Districts.	Amount paid superintendent or principal.	Amount paid regular teachers.	Amount paid special teachers.	Total amount paid for instruction.	Amount paid for incidentals.	Total cost of schools.	Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
Grand Rapids	\$2,500 00	\$108,875 42	\$3,000 00	\$114,375 00	\$29,617 56	\$143,992 98	\$14 47	\$3 75	\$18 22
Grace Lake	1,200 00	1,247 00	.....	2,447 00	460 00	2,907 00	11 93	2 24	14 17
Grayling	800 00	1,225 00	.....	2,025 00	807 34	2,832 34	12 18	4 83	16 96
Greenland No. 2	700 00	350 00	.....	1,050 00	236 28	1,286 28	21 42	4 82	26 24
Greenville	1,500 00	6,045 00	675 00	8,220 00	2,110 00	10,330 00	12 80	3 16	15 46
Grindstone City	650 00	600 00	.....	1,250 00	262 66	1,512 66	6 85	1 33	7 68
Grosse Isle	550 00	800 00	.....	1,350 00	206 33	1,556 33	.....	.....	.....
Hadley	500 00	420 00	.....	920 00	165 00	1,085 00	10 22	1 83	12 05
Hancock	1,500 00	5,306 75	.....	6,806 75	3,612 50	10,419 25	16 64	8 83	25 47
Hanover	850 00	1,050 00	.....	1,900 00	300 00	2,200 00	12 42	1 96	14 39
Harbor Springs	650 00	864 00	.....	1,514 00	420 54	1,934 54	8 41	2 83	10 74
Harrisville	500 00	785 00	.....	1,285 00	338 78	1,623 78	6 84	2 12	8 96
Hart	700 00	1,000 00	.....	1,700 00	418 96	2,118 96	10 37	2 55	12 92
Hartford	700 00	1,224 00	.....	1,924 00	425 44	2,349 44	7 92	1 75	9 67
Hastings	1,000 00	4,024 00	.....	5,024 00	4,001 35	9,025 35	8 92	7 10	16 02
Heperia	550 00	904 50	.....	1,454 50	419 44	1,873 94	5 43	1 56	6 99
Highland Station	450 00	250 00	.....	700 00	208 00	908 00	5 65	1 67	7 33
Hilldale	1,100 00	5,896 00	323 00	7,319 00	2,942 70	10,261 70	11 44	4 61	16 06
Holland	1,100 00	4,800 00	30 00	5,930 00	1,908 47	7,838 47	8 01	2 57	10 58
Holly	1,000 00	2,100 00	.....	3,100 00	1,294 00	4,394 00	10 80	4 51	15 31
Homer	700 00	1,550 00	.....	2,250 00	450 00	2,700 00	7 98	1 59	9 57
Houghton	1,500 00	6,190 00	.....	7,690 00	7,692 37	15,382 37	20 56	20 56	41 12
Howell	1,050 00	3,900 00	.....	4,950 00	2,045 05	6,995 05	11 48	4 74	16 22
Hubbardston	600 00	540 00	.....	1,140 00	195 00	1,335 00	.....	.....	.....
Hudson	1,000 00	2,347 50	135 00	3,482 50	1,155 00	4,637 50	11 23	3 73	14 96
Imlay City	900 00	2,200 00	.....	3,100 00	422 47	3,522 47	10 10	1 37	11 47
Ionia	1,300 00	10,787 01	.....	12,087 01	3,100 84	15,187 85	14 85	3 80	18 65
Iron Mountain	1,200 00	6,783 25	.....	7,983 25	7,499 33	15,482 58	10 94	10 34	21 28
Ironwood	1,500 00	5,175 50	.....	6,675 50	2,300 00	8,975 50	.....	.....	.....
Ishpeming No. 1	600 00	400 00	.....	1,000 00	247 24	1,247 24	12 19	3 02	15 21
Jackson No. 1	1,800 00	20,910 58	700 00	23,410 58	9,525 39	32,935 97	15 05	6 12	21 17
Jackson No. 17	1,500 00	7,758 85	.....	9,258 85	3,849 80	13,108 65	7 52	3 18	10 65
Jamestown Centre	441 00	234 00	.....	675 00	145 72	820 72	8 54	1 84	10 38
Jonesville	1,100 00	1,880 00	.....	2,980 00	964 96	3,944 96	13 80	4 46	18 26
Kalamazoo	2,200 00	24,679 50	600 00	27,479 50	7,630 00	35,109 50	11 25	3 12	14 37

SUPERINTENDENT'S REPORT.

TABLE XIX.—Continued.

Districts.	Amount paid superin- tendent or principal.	Amount paid regular teachers.	Amount paid special teachers.	Total amount paid for instruction.	Amount paid for in- cidentals.	Total cost of schools.	Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
Kalkaska.....	\$900 00	\$1,550 00		\$2,450 00	\$1,332 68	\$3,782 68	\$11 29	\$6 14	\$17 43
Laingsburg.....	650 00	950 00		1,600 00	519 90	2,119 90	8 74	2 84	11 58
Lake Linden.....	1,400 00	7,288 50		8,688 50	4,968 42	13,654 92	18 39	7 65	21 04
Lakeview.....	720 00	1,125 00		1,845 00	435 03	2,280 03	8 83	2 08	10 91
L'Anse.....	800 00	1,470 00		2,270 00	1,276 24	2,546 24	13 84	7 78	21 62
Lansing.....	2,000 00	16,847 42	\$600 00	19,447 42	10,857 15	30,304 57	12 14	6 78	18 92
Lawton.....	700 00	819 00		1,519 00	400 87	1,919 87	8 63	2 27	10 90
Leslie.....	800 00	1,600 00		2,400 00	485 72	2,885 72	8 42	1 70	10 12
Linden.....	450 00	450 00		900 00	288 82	1,188 82			
Lisbon.....	540 00	270 00		810 00	142 36	952 36	9 10	1 60	10 70
Litchfield.....	630 00	891 00		1,521 00	615 02	2,136 02	9 94	4 02	13 96
Lowell.....	800 00	2,860 00		3,660 00	1,453 25	5,112 25	8 09	3 21	11 30
Ludington.....	1,200 00	13,107 75		14,307 75	6,589 77	20,897 52	10 62	4 89	15 51
Luther.....	800 00	1,500 00		2,300 00	500 00	2,800 00	9 50	2 07	11 57
Lyons.....	650 00	918 00		1,568 00	214 82	1,782 82	13 40	1 84	15 24
McBride.....	600 00	540 00		1,140 00	202 27	1,342 27	7 40	1 31	8 71
Mackinaw City.....	405 00	270 00		675 00	78 54	753 54	7 58	88	8 46
Mancelona.....	720 00	1,710 00		2,430 00	300 00	2,730 00	6 10	1 60	9 10
Manchester.....	900 00	2,280 00		3,180 00	1,180 38	4,360 38	10 64	3 95	14 59
Manistee.....	1,500 00	18,691 75	400 00	20,591 75	5,078 26	25,670 01	13 40	3 30	16 70
Manistique.....	900 00	2,700 00		3,600 00	1,300 00	4,900 00	12 59	4 54	17 13
Maple Rapids.....	500 00	837 00		1,337 00	273 80	1,610 80	8 35	1 71	10 06
Marcellus.....	540 00	870 00		1,410 00	257 25	1,667 25	8 65	1 58	10 23
Marine City.....	900 00	1,800 00		2,700 00	1,113 16	3,813 16	8 63	3 56	12 19
Marlette.....	700 00	860 00		1,560 00	359 86	1,919 86	7 92	1 83	9 75
Marquette.....	1,200 00	11,615 00	800 00	13,115 00	6,013 00	19,128 00	12 42	5 69	18 11
Marshall.....	1,500 00	7,575 00	850 00	9,925 00	3,954 75	13,879 75	16 16	6 44	22 60
Marysville.....	345 00	270 00		615 00	131 68	746 68	10 08	2 16	12 24
Mason.....	1,000 00	3,354 00		4,354 00	1,638 36	5,992 36	11 19	4 21	15 40
Mattawan.....	405 00	132 50		537 50	142 13	679 63	7 28	1 92	9 18
Mayville.....	550 00	550 00		1,100 00	319 17	1,419 17	6 11	1 77	7 88
Menominee.....	1,400 00	11,429 28		12,829 28	5,261 01	18,090 27	18 62	5 58	19 20
Michigamme.....	800 00	1,650 00		2,450 00	1,576 80	4,026 80	11 56	7 44	19 00
Middleville.....	700 00	950 00		1,650 00	627 09	2,277 09	8 97	3 41	12 38
Milford.....	900 00	1,570 00		2,470 00	900 00	3,370 00	8 34	3 04	11 38

FINANCIAL STATISTICS.

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TABLE XIX.—Continued.

Districts.	Amount paid superin- tendent or principal.	Amount paid regular teachers.	Amount paid special teachers.	Total amount paid for instruction.	Amount paid for in- cidentals.	Total cost of schools.	Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
Montague.....	\$1,100 00	\$2,710 13		\$3,810 13	\$1,209 91	\$5,020 04	\$11 80	\$3 74	\$15 54
Monroe City.....	1,200 00	4,100 00		5,200 00	2,071 67	7,271 67	11 21	4 46	15 67
Morrice.....	650 00	560 00		1,210 00	966 64	2,176 64	9 88	7 49	16 87
Morley.....	600 00	662 50		1,262 50	145 99	1,408 49	8 53	99	9 52
Mt. Clemens.....	1,200 00	4,123 25	\$250 00	5,573 25	1,621 94	7,195 19	10 21	2 97	13 18
Mt. Morris.....	405 00	252 00		657 00	168 21	825 21	5 52	1 41	6 93
Mt. Pleasant.....	1,000 00	3,523 40		4,523 40	2,252 43	6,775 83	9 69	4 82	14 51
Muir.....	700 00	720 00		1,420 00	361 82	1,781 82	10 29	2 62	12 91
Muskegon.....	2,000 00	40,735 00	1,850 00	44,085 00	15,240 52	59,325 52	12 79	4 42	17 21
Nashville.....	860 00	1,650 00		2,510 00	500 00	3,010 00	9 65	1 92	11 57
National Mine.....	900 00	937 50		1,837 50	2,496 07	4,333 57	13 22	17 96	31 18
Negaunee.....	1,600 00	7,073 10	300 00	8,973 10	3,963 62	12,936 72	14 02	6 19	20 21
Newaygo.....	900 00	1,480 00		2,380 00	500 00	2,880 00	10 48	2 20	12 68
New Baltimore.....	600 00	560 00		1,160 00	652 15	1,812 15	9 75	5 48	15 23
Newbury.....	750 00	900 00		1,650 00	911 83	2,561 83	12 89	7 12	20 01
New Haven.....	540 00	477 00		1,017 00	217 82	1,234 82	5 15	1 11	6 26
New Hudson.....	405 00	120 00		525 00	95 47	620 47	10 10	1 84	11 94
New Troy.....	350 00	250 00		600 00	149 06	749 06			
Niles.....	1,600 00	7,909 25		9,509 25	3,554 57	13,063 82	14 12	5 25	19 37
North Adams.....	630 00	855 00		1,485 00	649 53	2,134 53	8 79	8 84	12 63
North Branch.....	650 00	900 00		1,550 00	560 51	2,110 51	6 25	2 26	8 51
Northport.....	450 00	540 00		990 00	164 82	1,154 82	6 39	1 07	7 46
Norway.....	900 00	3,356 75		4,256 75	1,884 46	6,141 21	13 64	6 04	19 68
Okemos.....	395 00	250 00		645 00	92 40	737 40	7 50	1 07	8 57
Onondaga.....	405 00	225 00		630 00	97 26	727 26	8 63	1 33	9 96
Ontonagon.....	1,000 00	2,100 00		3,100 00	1,338 58	4,438 58	14 22	6 14	20 36
Opechee.....	1,050 00	4,200 00		5,250 00	600 00	5,850 00	13 78	1 57	15 35
Orion.....	500 00	514 00		1,014 00	121 11	1,135 11	10 35	1 24	11 59
Ortonville.....	600 00	220 00		820 00	325 43	1,145 43	6 83	2 71	9 54
Oscoda.....	900 00	3,683 25	30 00	4,613 25	1,305 77	5,919 02	9 14	2 59	11 73
Osseo.....	360 00	171 00		531 00	83 03	614 03	5 11	80	5 91
Otsego.....	950 00	1,854 00		2,804 00	1,479 56	4,283 56	9 84	5 19	15 03
Otter Lake.....	495 00	216 00		711 00	103 69	814 69	10 46	1 52	11 98
Ovid.....	1,000 00	2,240 00		3,240 00	1,004 18	4,244 18	12 90	4 00	16 90
Owosso.....	1,200 00	10,724 50		11,924 50	9,980 71	21,905 21	11 21	9 38	20 59

SUPERINTENDENT'S REPORT.

TABLE XIX.—Continued.

Districts.	Amount paid superintendent or principal.	Amount paid regular teachers.	Amount paid special teachers.	Total amount paid for instruction.	Amount paid for incidentals.	Total cost of schools.	Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
Palo.....	\$500 00	\$460 00	.....	\$960 00	\$124 48	\$1,084 48	\$12 81	\$1 60	\$18 91
Paris, tp. No. 1.....	600 00	207 00	.....	807 00	160 56	967 56	6 96	1 38	8 34
Paris,	450 00	270 00	.....	720 00	148 87	868 87	7 50	1 55	9 05
Parma.....	800 00	1,048 00	.....	1,848 00	282 93	2,130 93	.....	.....	.....
Paw Paw.....	1,000 00	2,680 00	\$200 00	3,880 00	1,000 00	4,880 00	15 04	3 88	18 92
Petersburg.....	450 00	720 00	.....	1,170 00	223 94	1,393 94	8 36	1 60	9 96
Pierson.....	405 00	270 00	.....	675 00	149 01	824 01	6 25	1 37	7 62
Pinckney.....	700 00	880 00	.....	1,580 00	1,491 55	3,071 55	10 00	9 44	19 44
Pinnebog.....	550 00	200 00	.....	750 00	151 81	901 81	.....	.....	.....
Plainwell.....	900 00	2,121 00	.....	3,021 00	729 89	3,750 89	9 50	2 80	11 80
Plymouth.....	1,000 00	2,025 00	.....	3,025 00	600 00	3,625 00	10 80	2 14	12 94
Pontiac.....	1,600 00	9,550 00	500 00	11,650 00	3,503 51	15,153 51	18 78	4 13	17 86
Port Austin.....	700 00	600 00	.....	1,300 00	400 00	1,700 00	10 74	3 31	14 05
Port Crescent.....	450 00	150 00	.....	600 00	134 35	734 35	9 38	2 10	11 48
Port Hope.....	600 00	300 00	.....	900 00	207 92	1,107 92	7 82	1 81	9 63
Port Huron.....	1,500 00	14,889 00	.....	16,389 00	7,249 71	23,638 71	11 08	4 89	15 97
Portland.....	80 000	3,050 00	.....	3,850 00	461 90	4,311 90	10 55	1 27	11 82
Port Sanilac.....	400 00	72 00	.....	472 00	89 89	561 89	6 74	1 28	8 02
Powers.....	600 00	350 00	.....	950 00	331 29	1,281 29	7 85	2 78	10 58
Quincy, No. 1.....	1,000 00	1,350 00	.....	2,350 00	1,864 88	3,714 88	13 50	7 84	21 34
Reading.....	800 00	1,129 00	.....	1,929 00	470 00	2,399 00	8 04	1 96	10 00
Reed City.....	900 00	2,500 00	.....	3,400 00	486 64	3,886 64	9 77	1 40	11 17
Republic.....	1,400 00	3,950 00	.....	5,350 00	7,104 71	12,454 71	12 95	17 20	30 15
Richmond.....	675 00	747 00	.....	1,422 00	373 02	1,795 02	9 12	2 89	11 51
Rochester.....	775 00	960 00	.....	1,735 00	915 00	2,650 00	8 55	4 50	13 05
Rockland.....	1,000 00	1,900 00	.....	2,900 00	900 00	3,800 00	17 47	5 42	22 89
Rogers City.....	400 00	240 00	.....	640 00	700 00	1,340 00	.....	.....	.....
Romeo.....	1,500 00	2,500 00	.....	4,000 00	1,556 31	5,556 31	10 93	4 25	15 18
Saginaw City.....	1,800 00	23,205 11	1,150 00	26,155 11	14,323 10	40,478 21	10 78	5 87	16 60
St. Charles.....	750 00	1,050 00	.....	1,800 00	261 97	2,061 97	10 65	1 55	12 20
St. Clair.....	1,000 00	3,700 00	400 00	5,100 00	2,261 10	7,361 10	10 81	4 79	15 60
St. Johns.....	1,200 00	4,828 00	400 00	6,428 00	1,996 53	8,424 53	10 97	3 40	14 37
St. Louis.....	1,000 00	3,700 00	.....	4,700 00	2,855 73	7,555 73	12 50	7 60	20 10
Salem.....	360 00	153 75	.....	513 75	116 46	630 21	8 42	1 91	10 33
Saline.....	900 00	1,680 00	2,580 00	691 00	3,271 00	12 06	3 22	15 28

FINANCIAL STATISTICS.

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TABLE XIX.—Continued.

Districts.	Amount paid superintendent or principal.	Amount paid regular teachers.	Amount paid special teachers.	Total amount paid for instruction.	Amount paid for incidentals.	Total cost of schools.	Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
Sand Beach.....	\$650 00	\$1,325 00	.....	\$1,975 00	\$811 71	\$2,786 71	\$7 84	\$3 22	\$11 06
Saranac.....	650 00	1,255 00	.....	1,905 00	512 13	2,417 13	9 87	2 65	12 52
Saugatuck.....	650 00	1,044 00	.....	1,694 00	542 45	2,236 45	8 51	2 73	11 24
Sault Ste Marie.....	1,200 00	4,734 50	.....	5,934 50	8,843 64	14,778 14	9 57	14 26	23 83
Schoolcraft.....	1,000 00	1,687 30	.....	2,687 30	711 59	3,398 89	13 30	3 52	16 82
Shaftsbury.....	225 00	316 17	.....	541 17	68 86	609 53	7 52	95	8 47
Shelby.....	600 00	937 00	.....	1,437 00	368 07	1,805 07	7 52	1 93	9 45
South Haven.....	900 00	1,946 00	.....	2,846 00	765 78	3,611 78	6 27	1 69	7 96
South Lyon.....	700 00	684 00	.....	1,384 00	483 00	1,817 00	.....	.....	.....
Sparta.....	700 00	1,000 00	.....	1,700 00	239 98	1,939 98	10 43	1 47	11 90
Spring Lake.....	1,000 00	3,080 00	.....	4,080 00	1,300 00	5,380 00	9 50	3 07	12 57
Springport.....	700 00	750 00	.....	1,450 00	275 00	1,725 00	12 72	2 41	15 13
Standish.....	400 00	350 00	.....	750 00	100 00	850 00	.....	.....	.....
Stanton.....	950 00	3,500 00	.....	4,450 00	915 55	5,365 55	12 40	2 55	14 95
Stephenson.....	700 00	450 00	.....	1,150 00	222 93	1,372 93	9 83	1 90	11 73
Sturgis.....	1,000 00	3,168 50	.....	4,168 50	1,536 62	5,705 12	9 65	3 56	13 21
Sutton's Bay.....	300 00	240 00	.....	540 00	140 57	680 57	8 71	2 27	10 98
Tawas City.....	800 00	2,000 00	.....	2,800 00	1,565 51	4,365 51	9 12	5 10	14 22
Tecumseh.....	1,000 00	3,741 25	.....	4,741 25	1,504 20	6,245 45	10 82	3 43	14 25
Thornville.....	418 50	225 00	.....	643 50	391 58	1,035 08	9 46	5 76	15 22
Three Rivers, No. 1....	1,500 00	3,660 00	.....	5,160 00	1,382 75	6,542 75	12 90	3 46	16 36
Three Rivers, No. 4....	700 00	1,280 00	.....	1,980 00	886 08	2,866 08	.....	.....	.....
Traverse City.....	1,500 00	6,882 50	\$1,000 00	9,382 50	2,240 15	11,622 65	14 15	3 37	17 52
Trenton.....	650 00	550 00	.....	1,200 00	198 13	1,398 13	7 27	1 20	8 47
Trufant.....	210 00	208 50	.....	418 50	168 74	587 24	8 45	1 39	4 84
Union City.....	1,000 00	3,125 00	.....	4,125 00	1,038 59	5,163 59	11 92	3 00	14 92
Unionville.....	450 00	450 00	.....	900 00	186 32	1,086 32	7 03	1 46	8 49
Utica.....	800 00	1,340 00	.....	2,140 00	477 59	2,617 59	12 81	2 86	15 67
Vandalia.....	600 00	748 00	.....	1,348 00	261 08	1,609 08	10 21	1 98	12 19
Vassar.....	1,100 00	2,640 00	.....	3,740 00	2,292 03	6,032 03	11 72	7 18	18 90
Vermontville.....	700 00	873 00	.....	1,573 00	1,483 00	3,056 00	8 19	7 72	15 91
Vernon.....	700 00	900 00	.....	1,600 00	200 00	1,800 00	10 46	1 24	11 70
Vicksburg.....	720 00	1,377 00	.....	2,097 00	929 18	3,026 18	9 62	4 26	13 88
Vriesland.....	439 20	220 00	.....	659 20	108 90	768 10	7 17	1 18	8 35
Vulcan.....	800 00	950 00	.....	1,750 00	1,279 05	3,029 05	15 91	11 63	27 54

SUPERINTENDENT'S REPORT.

TABLE XIX.—Continued.

Districts.	Amount paid superin- tendent or principal.	Amount paid regular teachers.	Amount paid special teachers.	Total amount paid for instruction.	Amount paid for in- cidentals.	Total cost of schools.	Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
Wayland	\$540 00	\$535 00	-----	\$1,075 00	\$325 00	\$1,400 00	\$10 75	\$3 25	\$14 00
Wayne.....	600 00	400 00	-----	1,000 00	231 14	1,231 14	6 49	1 50	7 99
West Bay City.....	1,500 00	16,485 00	-----	17,985 00	8,901 61	26,886 61	10 05	4 98	15 03
Whitehall.....	1,000 00	3,000 00	-----	4,000 00	1,896 13	5,896 13	10 87	5 15	16 02
White Pigeon.....	1,200 00	1,600 00	-----	2,800 00	400 00	3,200 00	10 49	1 50	11 99
White Rock.....	250 00	265 00	-----	515 00	100 00	615 00	-----	-----	-----
Williamston.....	750 00	1,600 00	-----	2,350 00	481 65	2,831 65	8 70	1 78	10 48
Wyandotte.....	1,000 00	3,170 00	\$100 00	4,270 00	2,246 88	6,516 88	10 70	5 63	16 33
Yale.....	800 00	1,300 00	-----	2,100 00	397 89	2,497 89	8 61	1 63	10 24
York, No. 1, fl.....	700 00	828 11	-----	1,528 11	391 19	1,919 30	-----	-----	-----
Zeeland.....	580 00	830 00	-----	1,410 00	434 52	1,844 52	5 28	1 62	6 90
Zilwaukee.....	750 00	1,500 00	-----	2,250 00	751 15	3,001 15	10 23	8 41	18 64
Zutphen	360 00	125 00	-----	485 00	111 97	596 97	4 71	1 09	5 80

MISCELLANEOUS STATISTICS.

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TABLE XX.

*Miscellaneous Statistics of Two Hundred and Eighty-nine Graded Schools as reported
by Superintendents and Principals for the School Year 1888-9.*

Districts.	Total enrollment.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	No. of special teachers.	Average No. of pupils to each teacher.	Portion of superintendent's time given to supervision.	Number of pupils studying—				Is special instruction given in—		
									Latin.	Greek.	French.	German.	Vocal music?	Drawing?	Penmanship?
Addison.....	108	95	87	1	2	—	82	—	—	—	—	—	no	no	yes
Adrian.....	1,433	1,018	944	3	30	1	84	all	30	—	8	11	no	yes	yes
Alaska.....	85	68	50	1	1	—	34	—	—	—	—	—	no	no	no
Albion.....	952	615	595	2	15	1	36	1-2	—	—	—	—	yes	yes	yes
Algonac.....	255	179	150	1	3	—	45	—	—	—	—	—	no	yes	yes
Allegan.....	701	587	552	1	16	1	34	1-8	20	—	—	22	no	no	no
Allouez.....	140	86	80	1	2	—	29	1-20	—	—	—	—	no	no	no
Alma.....	533	420	315	3	7	1	42	1-20	16	—	—	—	yes	yes	yes
Almont.....	245	210	193	1	4	—	42	1-6	—	—	—	—	no	yes	yes
Alpena.....	1,946	1,119	1,045	5	26	—	37	all	25	—	—	15	no	no	no
Ann Arbor.....	2,091	1,589	1,534	8	37	3	35	5-6	279	51	42	124	yes	yes	yes
Atlantic Mine.....	225	171	130	1	2	—	57	—	—	—	—	—	no	no	no
Bad Axe.....	210	210	153	1	3	—	52	—	—	—	—	—	no	yes	yes
Baldwin.....	159	113	89	1	1	—	56	—	—	—	—	—	no	no	yes
Bangor No. 3 fl.....	88	67	54	1	1	—	33	—	—	—	—	—	no	no	no
Bath.....	119	119	—	1	2	—	39	—	—	—	—	—	no	no	no
Battle Creek.....	1,897	1,374	1,270	2	41	—	32	all	39	6	—	23	no	yes	yes
Bay City.....	5,695	2,940	2,780	4	78	2	35	all	78	6	18	44	no	yes	no
Belding.....	278	209	180	1	3	—	52	—	—	—	—	—	no	no	no
Berlin.....	98	88	68	—	2	—	44	—	—	—	—	—	no	yes	yes
Berrien Springs.....	172	137	137	—	5	—	23	2-9	—	—	—	—	no	no	no
Big Rapids.....	1,398	1,005	784	1	23	—	41	4-5	25	—	—	15	no	no	no
Birmingham.....	329	268	—	2	5	—	38	1-6	2	—	5	2	yes	yes	yes
Blissfield.....	180	132	124	1	3	—	33	1-20	8	—	—	—	no	no	no
Boyne City.....	142	103	87	1	2	—	34	1-12	—	—	—	—	no	no	yes
Brighton.....	232	193	181	1	4	—	39	—	—	—	—	—	no	yes	yes
Britton.....	105	77	74	1	2	—	38	—	—	—	—	—	no	no	no
Bronson.....	274	266	239	1	4	—	53	—	—	—	—	—	no	no	yes
Brown City.....	136	130	90	1	1	—	65	—	—	—	—	—	no	no	no

TABLE XX.—Continued.

Districts.	Total enrollment.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	No. of special teachers.	Average No. of pupils to each teacher.	Portion of superintendent's time given to supervision.	Number of pupils studying—				Is special instruction given in—		
									Latin.	Greek.	French.	German.	Vocal music?	Drawing?	Penmanship?
Burr Oak.....	230	164	151	2	3	.....	83	.....	.....	.....	.....	.....	no	no	no
Cadillac.....	1,065	663	610	2	18	1	87	1-2	3	.....	.....	15	yes	no	no
Caledonia.....	145	145	113	1	2	.....	48	.....	.....	.....	.....	.....	no	yes	yes
Calumet.....	2,300	1,694	1,508	6	29	1	49	3-5	.....	.....	.....	80	no	no	no
Cannonsburg.....	92	60	44	1	1	.....	80	.....	.....	.....	.....	.....	no	no	yes
Capac.....	184	175	144	1	3	.....	44	.....	.....	.....	.....	.....	no	no	yes
Caro.....	564	399	379	.....	9	.....	44	1-5	18	.....	.....	.....	yes	no	no
Carrollton No. 2.....	132	87	78	1	1	.....	43	1-10	.....	.....	.....	.....	no	no	no
Carson City.....	305	300	.....	1	5	.....	50	.....	6	.....	.....	.....	no	no	no
Carsonville.....	171	100	67	1	1	.....	50	.....	.....	.....	.....	.....	no	no	yes
Caseville.....	180	153	99	1	3	.....	38	.....	.....	.....	.....	.....	no	no	yes
Cass City.....	801	220	188	2	2	.....	55	.....	.....	.....	.....	.....	yes	no	yes
Cedar Springs.....	290	231	209	.....	6	.....	38	1-6	.....	.....	.....	.....	no	yes	yes
Centerville.....	236	178	166	2	4	.....	30	1-5	5	.....	.....	.....	no	no	yes
Central Mine.....	204	178	187	1	2	.....	59	1-10	.....	.....	.....	.....	no	no	no
Champion.....	521	453	413	2	8	.....	45	4-9	.....	.....	.....	.....	no	no	no
Charlevoix.....	351	248	233	1	5	.....	41	1-6	.....	.....	.....	.....	no	no	yes
Charlotte.....	1,138	764	739	2	21	1	33	all	46	.....	.....	8	yes	yes	yes
Cheboygan.....	419	265	252	3	5	.....	33	1-4	.....	.....	.....	.....	no	no	no
Chelsea.....	328	302	272	1	7	.....	37	3-5	2	.....	.....	7	no	no	no
Clinton.....	241	203	176	1	4	.....	41	1-8	.....	.....	.....	.....	no	no	no
Clio No. 7.....	188	166	135	1	2	.....	55	.....	.....	.....	.....	.....	no	yes	yes
Coldwater.....	1,101	872	830	2	19	2	42	2-3	38	5	.....	18	yes	no	yes
Concord.....	199	146	.....	1	4	.....	29	1-10	12	.....	.....	.....	yes	yes	yes
Constantine.....	347	227	222	1	7	.....	28	1-4	15	1	.....	12	no	no	yes
Coopersville.....	284	174	149	1	3	.....	45	.....	.....	.....	.....	.....	no	no	no
Coral.....	163	136	96	1	1	.....	68	.....	.....	.....	.....	.....	no	no	yes
Corunna.....	394	392	.....	1	8	.....	48	.....	7	.....	.....	5	no	no	no
Croswell.....	211	145	145	1	2	.....	48	.....	.....	.....	.....	.....	no	no	no
Dansville.....	163	131	112	1	8	.....	33	1-12	.....	.....	.....	.....	no	no	yes
Davison.....	174	174	.....	.....	2	.....	87	.....	.....	.....	.....	.....	no	no	yes
Dearborn.....	198	198	112	1	1	.....	99	.....	.....	.....	.....	.....	yes	yes	yes
Deerfield.....	165	165	.....	1	4	.....	33	.....	.....	.....	.....	.....	no	no	yes
Detroit.....	23,919	17,970	16,922	23	434	5	39	all	294	20	97	159	yes	yes	yes
Dexter.....	277	209	197	1	6	.....	29	1-5	7	.....	.....	9	yes	no	no

TABLE XX.—Continued.

Districts.	Total enrollment.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	No. of special teachers.	Average No. of pupils to each teacher.	Portion of superintendent's time given to supervision.	Number of pupils studying—				Is special instruction given in—		
									Latin.	Greek.	French.	German.	Vocal music?	Drawing?	Penmanship?
Douglas	221	145	128	2	2	....	86	.....	.....	.....	.....	.....	no	no	no
Dryden	153	134	119	1	2	....	45	.....	.....	.....	.....	.....	no	no	no
Dundee	336	294	227	1	6	....	42	1-6	8	.....	.....	.....	no	yes	yes
East Blissfield	201	173	161	1	3	....	43	1-12	5	.....	.....	.....	no	no	no
East Holland	100	.....	70	1	1	....	.....	.....	.....	.....	.....	.....	yes	yes	yes
East Hudson	189	166	153	1	3	....	41	.....	.....	.....	.....	.....	no	no	yes
Eastlake	243	155	142	1	2	....	52	1-3	.....	.....	.....	.....	no	no	yes
East Saginaw	5,083	3,718	3,565	8	89	3	39	all	100	15	.....	1000	yes	yes	yes
East Tawas	604	333	304	1	6	1	48	.....	.....	.....	.....	.....	yes	no	no
Eaton Rapids	593	385	329	1	10	....	35	1-5	6	.....	1	18	yes	yes	yes
Ecorse	200	123	98	1	1	....	63	.....	.....	.....	.....	.....	no	no	yes
Edwardsburg	130	103	91	1	2	....	35	1-20	.....	.....	.....	.....	no	no	yes
Elk Rapids	344	251	207	1	8	....	28	1-6	8	.....	.....	.....	no	no	no
Elm Hall	110	.....	64	1	1	....	.....	.....	.....	.....	.....	.....	no	no	no
Elsie	217	170	153	1	3	....	42	.....	.....	.....	.....	.....	no	no	no
Erie	149	108	81	.....	2	....	54	.....	.....	.....	.....	.....	no	no	yes
Escanaba	317	480	434	1	11	...	40	1-3	.....	.....	.....	.....	no	no	no
Essexville	487	235	228	1	4	....	53	.....	.....	.....	.....	.....	no	no	no
Evart	562	476	302	1	6	....	68	1-6	.....	.....	.....	.....	yes	yes	yes
Farwell	184	119	104	1	2	....	39	.....	.....	.....	.....	.....	no	no	no
Ferrysburg	170	.....	119	1	2	....	.....	.....	.....	.....	.....	.....	no	no	no
Filer, No. 1	108	80	.....	1	1	....	40	.....	.....	.....	.....	.....	no	no	yes
Fillmore, No. 2	150	150	104	.....	2	....	75	.....	.....	.....	.....	.....	no	no	yes
Flint	2,474	1,420	1,401	2	37	....	37	all	120	10	15	40	no	yes	yes
Fort Gratiot	579	489	372	1	6	....	69	1-3	.....	.....	.....	.....	yes	yes	yes
Fowlerville	272	219	201	1	6	....	31	1-6	.....	.....	.....	.....	no	yes	yes
Frankfort	395	379	250	2	6	....	47	1-6	.....	.....	.....	.....	no	yes	yes
Franklin, No. 1	133	84	68	.....	2	....	42	.....	.....	.....	.....	.....	no	no	no
Franklin, No. 2	156	112	101	1	2	....	37	.....	.....	.....	.....	.....	no	no	no
Franklin, No. 5	203	143	100	2	1	....	49	.....	.....	.....	.....	.....	no	no	no
Galesburg	193	163	154	1	3	....	42	.....	4	.....	.....	.....	no	no	no
Galien	187	171	163	1	3	....	43	1-12	.....	.....	.....	.....	no	no	no
Gaylord	178	.....	83	2	1	....	.....	.....	.....	.....	.....	.....	no	no	yes
Gobleville	125	100	100	1	2	....	33	.....	.....	.....	.....	.....	no	yes	yes
Graafschap	125	70	62	1	1	....	35	.....	.....	.....	.....	.....	no	yes	yes

SUPERINTENDENT'S REPORT.

TABLE XX.—Continued.

Districts.	Total enrollment.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	No. of special teachers.	Average No. of pupils to each teacher.	Portion of superintendent's time given to supervision.	Number of pupils studying—				Is special instruction given in—		
									Latin.	Greek.	French.	German.	Vocal music?	Drawing?	Penmanship?
Grand Haven.....	1,540	995	935	2	23	1	41	3-5	10				no	no	yes
Grand Ledge.....	253		146	1	8			1-6					no	no	no
Grand Rapids.....	13,618	7,902	7,481	6	207	4	37	all	197	18	48	91	yes	yes	yes
Grass Lake.....	250	205	197	1	4		41	1-4	6			5	no	no	yes
Grayling.....	243	167	153	1	8		42	1-6	2			5	no	no	no
Greenland, No. 2.....	49	49	34	1	1		24						yes	no	yes
Greenville.....	889	668	631	2	16	1	37	4-7	23	8	5	5	yes	no	yes
Grindstone City.....	260	197	181	1	2		66	1-20					no	no	yes
Grosse Isle.....	115		71	1	8								no	no	yes
Hadley.....	124	90	87	1	2		30						no	no	yes
Hancock.....	608	409	385	2	10		34	1-3			12	10	no	no	no
Hanover.....	181	153	135	1	8		38	1-20	7				no	no	no
Harbor Springs.....	219	180	167	1	3		45						no	no	no
Harrieville.....	206	188	95	2	3		33	1-12					yes	no	yes
Hart.....	215	164	150	1	3		41	1-10					no	no	yes
Hartford.....	336	243	213	1	4		49						no	no	no
Hastings.....	805	563	520	2	11		43	1-3	20			7	no	no	no
Hesperia.....	269	268	204	2	3		53						no	no	yes
Highland Station.....	130	124		1	1		62	1-6					no	no	yes
Hillsdale.....	886	640	586	3	14	1	38	1-2	35				yes	no	no
Holland.....	1,202	740	700	1	15	1	46	2-3	7				yes	no	no
Holly.....	453	287	266	1	6		41				2	12	no	yes	yes
Homer.....	299	282		2	4		47	1-6					no	no	yes
Houghton.....	490	374	352	1	18		27	1-2	8				no	no	no
Howell.....	683	431	405	1	12		33		7				no	yes	yes
Hubbardston.....	138		103	1	2								no	no	no
Hudson.....	352	310	288	1	7	1	39	1-3	21	8		14	yes	yes	yes
Imlay City.....	470	306	282	1	7		33	1-4				18	no	no	no
Ionia.....	1,373	814	809	4	20	1	34	2-3	50	2	5	10	yes	yes	yes
Iron Mountain.....	1,224	725	636	1	15		45	1-2				10	no	no	no
Ironwood.....	858			2	9			1-3	10				yes	yes	yes
Ishpeming, No. 1.....	92	82	49		2		41						no	no	yes
Jackson, No. 1.....	2,289	1,556	1,455	2	42	1	35	all	46	8	7	31	no	yes	no
Jackson, No. 17.....	1,542	1,230	1,109	2	20		56	1-2				9	no	no	no
Jamestown.....	94	79	70	1	1		39						no	no	no

TABLE XX.—Continued.

Districts.	Total enrollment.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	No. of special teachers.	Average No. of pupils to each teacher.	Portion of superintendent's time given to supervision.	Number of pupils studying—				Is special instruction given in—		
									Latin.	Greek.	French.	German.	Vocal Music?	Drawing?	Penmanship?
Jonesville.....	308	216	203	1	5	....	86	1-3	7	....	....	16	no	no	yes
Kalamazoo.....	3,914	2,443	2,321	2	61	1	39	all	106	8	21	17	yes	no	yes
Kalkaska.....	408	217	195	1	5	....	86	1-10	....	....	....	....	no	no	no
Laingsburg.....	202	183	....	1	3	....	46	....	....	....	....	....	no	no	no
Lake Linden.....	984	649	640	1	18	....	84	1-3	8	....	8	....	no	yes	yes
Lakeview.....	409	209	190	1	4	....	42	1-12	....	....	....	....	no	no	no
L'Anse.....	217	164	132	1	4	....	33	1-4	....	....	....	....	no	no	no
Lansing.....	2,477	1,601	1,484	4	38	1	38	all	95	....	....	35	yes	yes	no
Lawton.....	231	176	167	1	4	....	35	1-12	....	....	....	....	no	yes	yes
Leslie.....	439	285	267	1	5	....	48	1-6	12	....	....	2	no	no	no
Linden.....	180	....	101	1	2	....	....	....	....	....	....	....	no	no	yes
Lisbon.....	107	89	71	1	1	....	44	....	....	....	....	....	no	no	no
Litchfield.....	153	153	120	1	3	....	38	....	....	....	....	....	no	no	yes
Lowell.....	517	452	434	2	8	....	45	1-7	....	....	....	....	no	no	yes
Ludington.....	2,103	1,347	1,257	2	31	....	41	5-6	25	....	....	20	no	no	no
Luther.....	431	242	209	1	4	....	48	1-12	....	....	....	....	no	no	no
Lyons.....	149	117	111	1	3	....	29	....	....	....	....	....	no	no	yes
McBride.....	172	154	142	2	1	....	51	....	....	....	....	....	no	no	no
Mackinaw City.....	101	89	66	....	2	....	44	....	....	....	....	....	no	no	no
Mancelona.....	310	300	262	1	6	....	44	....	....	....	....	....	yes	no	yes
Manchester.....	365	299	282	1	7	....	37	1-4	6	....	....	4	no	no	no
Manistee.....	3,023	1,537	1,483	7	41	1	32	all	36	....	....	30	no	no	yes
Manistique.....	450	286	259	1	6	....	41	....	....	....	....	....	no	no	no
Maple Rapids.....	160	160	142	2	2	....	40	....	....	....	....	....	no	no	no
Marcellus.....	199	163	145	2	2	....	41	....	....	....	....	....	no	no	no
Marine City.....	460	313	274	1	7	....	39	1-6	....	....	....	....	no	no	no
Marlette.....	291	197	161	1	3	....	49	1-18	5	....	....	....	no	yes	yes
Marquette.....	1,431	1,056	937	2	22	1	44	5-7	25	4	....	25	yes	no	no
Marshall.....	797	614	597	3	19	1	28	2-3	46	....	....	13	yes	no	yes
Marysville.....	113	61	61	....	2	....	30	....	....	....	....	....	no	no	yes
Mason.....	585	389	360	1	10	....	35	1-2	13	....	....	12	no	no	no
Mattawan.....	86	74	63	1	1	....	37	....	....	....	....	....	no	yes	yes
Mayville.....	203	180	145	1	2	....	60	....	....	....	....	....	no	no	no
Menominee.....	1,428	940	861	1	24	....	38	2-3	11	....	....	17	no	no	no
Michigamme.....	319	212	191	2	3	....	42	....	....	....	....	....	no	yes	yes

SUPERINTENDENT'S REPORT.

TABLE XX.—Continued.

Districts.	Total enrollment.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	No. of special teachers.	Average No. of pupils to each teacher.	Portion of superintendent's time given to supervision.	Number of pupils studying—				Is special instruction given in—		
									Latin.	Greek.	French.	German.	Vocal Music?	Drawing?	Pennmanship?
Middleville.....	184	184	.....	1	3	.....	46	.....	.....	.....	.....	.....	no	no	yes
Milan.....	172	.....	154	1	4	.....	.....	.....	5	.....	.....	.....	no	no	yes
Milford.....	378	296	271	1	6	.....	42	.....	.....	.....	.....	.....	no	no	no
Montague.....	557	323	293	2	6	.....	40	1-8	10	.....	.....	.....	no	yes	yes
Monroe City.....	619	464	418	1	11	.....	39	1-3	114	4	2	12	yes	yes	no
Morrice.....	129	129	120	1	2	.....	43	.....	.....	.....	.....	.....	yes	yes	yes
Morley.....	175	148	119	1	2	.....	49	.....	.....	.....	.....	.....	no	no	no
Mt. Clemens.....	1,019	546	530	2	12	1	39	1-2	3	.....	.....	8	yes	no	yes
Mt. Morris.....	121	119	80	1	1	.....	58	.....	.....	.....	.....	.....	no	no	no
Mt. Pleasant.....	695	467	416	1	10	.....	43	1-4	.....	.....	.....	14	no	no	no
Muir.....	189	137	127	1	3	.....	34	.....	3	.....	.....	.....	no	yes	no
Muskegon.....	5,475	3,448	3,192	4	92	4	36	all	36	2	10	20	yes	yes	yes
Nashville.....	288	260	238	1	6	.....	37	1-4	.....	.....	.....	4	no	no	no
National Mine.....	186	139	112	2	1	.....	46	.....	.....	.....	.....	.....	no	no	no
Negaunee.....	1,181	640	603	2	16	1	36	1-2	15	.....	.....	.....	yes	yes	yes
Newaygo.....	290	227	206	1	4	.....	46	.....	.....	.....	.....	.....	no	no	yes
New Baltimore.....	139	119	103	1	2	.....	39	.....	.....	.....	.....	11	no	yes	no
Newbury.....	208	128	106	1	2	.....	43	1-12	.....	.....	.....	.....	no	no	yes
New Haven.....	200	197	103	1	2	.....	66	.....	.....	.....	.....	.....	no	no	no
New Hudson.....	59	52	51	1	1	.....	26	.....	.....	.....	.....	.....	no	no	yes
New Troy.....	128	.....	78	1	2	.....	.....	.....	.....	.....	.....	.....	no	no	no
Niles.....	890	673	646	2	18	.....	84	5-6	21	.....	.....	10	no	no	no
North Adams.....	179	169	.....	1	3	.....	42	1-12	.....	.....	.....	.....	no	no	yes
North Branch.....	336	248	192	1	3	.....	62	1-10	.....	.....	.....	.....	no	no	yes
Northport.....	158	154	.....	1	2	.....	51	.....	.....	.....	.....	.....	yes	yes	yes
Norway.....	422	312	274	1	7	.....	39	1-6	.....	.....	.....	8	no	no	no
Okemos.....	107	86	85	1	1	.....	43	.....	.....	.....	.....	.....	no	no	no
Onondaga.....	93	73	70	1	1	.....	36	.....	.....	.....	.....	.....	no	no	no
Ontonagon.....	812	218	168	1	5	.....	36	1-6	4	.....	.....	.....	no	yes	yes
Opechee.....	462	281	337	3	7	.....	38	1-12	.....	.....	.....	3	yes	yes	yes
Orion.....	141	98	88	1	2	.....	33	1-20	6	.....	.....	.....	no	no	no
Ortonville.....	125	129	87	1	1	.....	60	.....	.....	.....	.....	.....	no	no	no
Oscoda.....	910	505	420	1	11	1	42	1-3	.....	.....	.....	.....	yes	no	no
Osseo.....	104	104	54	1	1	.....	52	.....	.....	.....	.....	.....	no	no	yes
Otsego.....	425	285	267	1	6	.....	41	1-4	12	.....	.....	.....	yes	no	yes

TABLE XX.—Continued.

Districts.	Total enrollment.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	No. of special teachers.	Average No. of pupils to each teacher.	Portion of superintendent's time given to supervision.	Number of pupils studying—				Is special instruction given in—		
									Latin.	Greek.	French.	German.	Vocal music?	Drawing?	Penmanship?
Otter Lake.....	113	68	59	1	1	—	34	—	—	—	—	—	no	no	no
Ovid.....	423	251	235	1	7	—	31	1-3	3	—	—	—	no	no	no
Owosso.....	1,555	1,064	1,000	4	23	1	39	5-7	—	—	—	—	yes	no	yes
Palo.....	87	78	72	2	1	—	28	—	—	—	—	—	no	no	yes
Paris No. 1.....	116	116	—	1	1	—	58	—	—	—	—	—	no	no	yes
Paris.....	96	96	63	1	1	—	48	—	—	—	—	—	no	no	no
Parma.....	213	—	133	1	8	—	—	—	9	—	—	—	no	no	yes
Paw Paw.....	354	258	244	1	7	1	32	1-2	9	—	—	12	no	no	yes
Petersburg.....	188	140	102	1	8	—	35	—	—	—	—	—	no	yes	yes
Pierson.....	108	108	97	1	1	—	54	—	—	—	—	—	no	no	no
Pinckney.....	219	158	148	2	2	—	45	1-3	—	—	—	—	no	no	no
Pinnebog.....	118	—	82	1	1	—	—	1-15	—	—	—	—	no	no	no
Plainwell.....	396	318	307	1	7	—	40	1-5	2	—	—	—	yes	no	no
Plymouth.....	345	280	253	1	6	—	40	1-10	8	—	—	12	no	no	yes
Pontiac.....	1,112	848	827	3	20	1	37	2-3	58	6	5	25	yes	no	no
Port Austin.....	143	121	113	1	2	—	40	—	—	—	—	1	no	no	no
Port Crescent.....	88	64	—	1	1	—	32	—	—	—	—	—	no	no	no
Port Hope.....	121	115	102	1	1	—	57	—	—	—	—	—	no	no	yes
Port Huron.....	2,627	1,480	1,319	1	36	—	40	all	20	1	6	5	no	no	no
Portland.....	467	365	340	—	10	—	36	1-2	—	—	—	—	no	no	yes
Port Sanilac.....	82	70	53	1	1	—	35	—	—	—	—	—	no	yes	yes
Powers.....	121	121	62	1	1	—	60	—	—	—	—	—	no	yes	yes
Quincy Mine No. 1.....	268	174	165	1	3	—	44	1-5	—	—	—	9	yes	yes	yes
Reading.....	264	240	218	1	4	—	48	1-12	—	—	—	—	no	yes	yes
Reed City.....	510	348	324	2	6	—	44	1-12	—	—	—	—	no	no	no
Republic.....	583	413	335	1	8	—	46	1-2	—	—	—	—	no	no	no
Richmond.....	206	156	—	1	3	—	39	1-10	—	—	—	—	no	yes	yes
Rochester.....	251	203	176	1	3	—	51	—	18	—	—	9	no	no	no
Rockland.....	166	166	127	2	3	—	33	—	—	—	—	—	yes	no	yes
Rogers City.....	125	—	71	1	1	—	—	—	—	—	—	—	no	no	no
Romeo.....	579	366	349	1	7	—	46	—	30	5	—	21	no	no	no
Saginaw City.....	3,381	2,433	2,294	6	50	3	44	all	55	7	11	18	yes	yes	no
St. Charles.....	291	169	142	1	3	—	42	1-18	—	—	—	—	no	no	no
St. Clair.....	615	472	430	2	11	1	36	3-7	11	—	3	9	yes	no	no
St. Johns.....	364	536	544	1	13	1	42	1-2	21	—	—	8	yes	no	no

TABLE XX.—Continued.

Districts.	Total enrollment.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	No. of special teachers.	Average No. of pupils to each teacher.	Portion of superintendent's time given to supervision.	Number of pupils studying—				Is special instruction given in—		
									Latin.	Greek.	French.	German.	Vocal music?	Drawing?	Penmanship?
St. Louis.....	1,011	376	-----	2	12	----	27	1-2	24	-----	-----	-----	no	no	no
Salem.....	99	61	56	1	1	----	30	1-20	-----	-----	-----	-----	no	no	no
Saline.....	281	214	206	1	5	----	36	1-8	-----	-----	-----	7	no	no	no
Sand Beach.....	284	252	220	1	4	----	50	-----	6	-----	-----	-----	no	yes	yes
Saranac.....	256	193	184	2	3	----	39	-----	-----	-----	-----	-----	no	no	yes
Saugatuck.....	354	199	182	1	4	----	39	1-2	-----	-----	-----	-----	no	no	no
Sault Ste. Marie.....	1,234	620	553	1	14	----	41	1-3	6	-----	-----	14	no	no	no
Schoolcraft.....	256	202	179	1	5	----	34	1-12	11	-----	-----	-----	no	yes	no
Shaftsbury.....	72	72	62	1	3	----	36	-----	-----	-----	-----	-----	no	no	yes
Shelby.....	288	191	169	1	3	----	48	1-6	-----	-----	-----	-----	no	no	yes
South Haven.....	509	454	337	1	7	----	57	1-8	-----	-----	-----	17	no	no	no
South Lyon.....	199	-----	126	1	3	----	-----	-----	-----	-----	-----	-----	no	no	no
Sparta.....	203	163	142	4	3	----	26	1-5	11	-----	-----	-----	no	no	no
Spring Lake.....	629	424	390	1	9	----	42	1-3	7	-----	-----	9	no	no	no
Springport.....	146	114	97	1	2	----	38	-----	-----	-----	-----	-----	no	no	no
Standish.....	148	-----	100	1	1	----	-----	-----	-----	-----	-----	-----	no	no	no
Stanton.....	473	359	331	1	10	----	33	-----	9	-----	-----	-----	no	no	no
Stephenson.....	198	117	106	1	1	----	58	-----	-----	-----	-----	-----	no	no	no
Sturgis.....	718	432	337	1	10	----	43	1-2	3	-----	-----	24	no	no	no
Sutton's Bay.....	84	62	52	1	1	----	31	-----	-----	-----	-----	-----	no	no	yes
Tawas City.....	307	307	194	1	5	----	51	1-6	-----	-----	-----	-----	yes	yes	yes
Tecumseh.....	511	438	432	1	12	----	34	1-2	27	-----	-----	30	no	no	no
Thornville.....	78	68	57	1	1	----	34	-----	-----	-----	-----	-----	no	no	yes
Three Rivers No. 1.....	484	400	375	1	11	----	33	3-8	23	-----	-----	8	yes	yes	yes
Three Rivers No. 4.....	229	-----	-----	1	4	----	-----	-----	-----	-----	-----	-----	no	no	yes
Traverse City.....	949	663	-----	2	17	1	36	1-2	12	-----	-----	10	no	no	yes
Trenton.....	296	165	141	1	2	----	55	-----	-----	-----	-----	-----	no	no	yes
Trufant.....	121	121	63	-----	2	----	60	-----	-----	-----	-----	-----	no	no	no
Union City.....	377	346	301	1	9	----	35	1-6	17	-----	-----	6	yes	no	no
Unionville.....	128	128	79	1	2	----	43	-----	-----	-----	-----	-----	no	no	no
Utica.....	255	167	150	2	3	----	33	-----	4	-----	-----	6	no	no	no
Vandalla.....	132	132	119	1	3	----	33	-----	10	-----	-----	-----	no	no	yes
Vassar.....	532	319	296	1	8	----	36	1-2	13	-----	-----	15	no	no	yes
Vermontville.....	241	192	172	1	3	----	48	1-6	-----	-----	-----	-----	no	no	no
Vernon.....	212	153	145	1	3	----	33	1-20	5	-----	-----	5	no	no	yes

TABLE XX.—Continued.

Districts.	Total enrollment.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	No. of special teachers.	Average No. of pupils to each teacher.	Portion of superintendent's time given to supervision.	Number of pupils studying—				Is special instruction given in—		
									Latin.	Greek.	French.	German.	Vocal music?	Drawing?	Penmanship.
Vicksburg.....	385	218	208	1	5	....	88	1-10	4	....	....	....	yes	no	no
Vriesland.....	100	92	69	1	1	....	48	....	....	....	....	....	yes	yes	yes
Vulcan.....	179	110	90	1	2	....	87	....	....	....	....	....	no	no	yes
Wayland.....	112	100	92	1	2	1	38	1-4	....	....	....	....	no	no	no
Wayne.....	193	154	118	1	1	....	77	....	....	....	....	....	no	no	yes
West Bay City.....	3,948	1,789	1,598	5	40	....	40	5-6	88	....	4	19	no	no	no
Whitehall.....	497	368	349	1	8	....	41	1-6	....	....	....	....	no	no	yes
White Pigeon.....	306	267	....	1	5	....	44	1-10	....	....	....	....	yes	yes	yes
White Rock.....	97	....	....	1	1	....	....	....	....	....	....	....	no	no	no
Willamston.....	300	270	245	2	4	....	45	3-10	3	....	....	....	no	no	yes
Wyandotte.....	529	399	366	1	9	1	40	1-4	8	....	....	11	yes	yes	yes
Yale.....	377	244	212	1	4	....	49	....	....	....	....	....	no	no	no
Zeeland.....	387	267	232	1	8	....	67	....	....	....	....	....	yes	no	yes
Zilwaukie.....	326	220	183	2	3	....	44	....	....	....	....	....	no	yes	no
Zutphen.....	103	103	....	1	1	....	51	....	....	....	....	....	no	no	no

TABLE XXI.

Statistics of the High School Department of Two Hundred and Twenty-one Graded School Districts, compiled from Reports of Superintendents and Principals for the School Year 1888-9.

Districts.	Enrollment in department.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Av. No. of pupils to each teacher.	No. of non-resident pupils.	Average age of class graduated.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Addison.....	28	20	20	1	.....	20	18	17	7	\$45 35	\$3 86	\$49 21
Adrian.....	155	131	123	1 1-2	4	29	17	18	.....	26 58	5 56	32 14
Albion.....	198	138	135	3	4	25	.....	18	4	.....	4 65	.....
Algonac.....	.....	35	27	1	.....	35	.....	.....	.....	28 09	3 36	31 45
Allegan.....	80	68	65	1	1	34	18	17	.....	.....	6 51	.....
Allouez.....	53	30	.....	1	.....	30	5	.....	.....	37 69	10 21	47 90
Alma.....	92	64	56	3	.....	21	32	17	.....	17 50	2 14	19 64
Almont.....	60	50	48	1	1	25	12	19	.....	12 46	2 86	15 32
Alpena.....	89	73	66	4	1	18	.....	19	.....	.....	14 16	.....
Ann Arbor.....	622	474	459	8	6	36	298	18	7	26 65	3 90	30 55
Atlantic Mine.....	50	40	37	1	.....	40	.....	13	.....	33 09	17 59	50 68
Bad Axe.....	27	.....	15	1	.....	.....	.....	.....	.....	.....	4 85	.....
Bath.....	39	.....	.....	1	.....	.....	.....	.....	.....	.....	1 67	.....
Battle Creek.....	94	88	82	1 1-3	4	22	21	.....	.....	.....	5 05	.....
Bay City.....	264	207	197	1 1-5	7	24	.....	18	1	28 70	4 12	32 82
Belding.....	85	75	68	1	1	37	21	15	6	.....	2 98	.....
Berrien Springs.....	30	22	22	.....	2	11	3	16	.....	32 20	3 51	35 71
Big Rapids.....	65	65	59	1	3	22	1	17	.....	25 00	3 75	28 75
Birmingham.....	89	62	.....	2	1	44	30	18	.....	.....	1 87	.....
Blissfield.....	73	53	51	1	1	27	.....	17	.....	.....	2 56	.....
Boyne City.....	38	27	21	1	.....	27	9	.....	.....	.....	3 75	.....
Brighton.....	116	77	71	1	1	39	.....	18	.....	.....	2 63	.....
Bronson.....	51	45	40	1	.....	45	8	18	.....	.....	2 63	.....
Burr Oak.....	48	26	24	1	.....	26	10	17	6	17 31	4 80	22 11
Cadillac.....	63	44	40	7-10	2	17	2	18	.....	28 54	5 66	34 20
Calumet.....	66	60	56	2	2	20	1	17	.....	.....	4 83	.....
Capac.....	66	.....	55	1	1	.....	10	.....	.....	.....	9 71	.....
Caro.....	75	58	52	3 3-10	25	19	19	5	7 50
Carson City.....	45	1	15	16	1 87

HIGH SCHOOL STATISTICS.

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TABLE XXI.—Continued.

Districts.	Enrollment in department.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Av. No. of pupils to each teacher.	No. of non-resident pupils.	Average age of class graduated.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Cass City	59	54	48	1	.....	54	14	19	.....	\$12 50	\$2 20	\$14 70
Cedar Springs	73	.....	.....	.....	2	.....	.....	16	.....	.....	4 17	.....
Centerville	52	40	38	1	1	20	15	17	.....	27 95	4 51	32 46
Central Mine	50	40	34	1	.....	40	.....	.....	.....	.....	61	.....
Champion	31	.....	.....	2	.....	.....	.....	16	.....	.....	14 08	.....
Charlevoix	43	35	34	1	.....	35	11	17	9	.....	3 63	.....
Charlotte	169	118	115	1	4	29	59	18	6	20 47	6 11	26 58
Cheboygan	54	45	42	1	1	27	.....	16	.....	27 77	2 10	29 87
Chelsea	52	42	36	1	1	21	18	19	.....	.....	3 32	.....
Clinton	47	33	27	1	.....	33	17	18	.....	24 00	1 48	25 48
Clio	65	57	47	1	.....	57	16	16	.....	16 87	1 40	18 27
Coldwater	115	94	92	1 1-3	2 1-2	25	23	19	6	28 74	4 08	32 77
Concord	48	35	.....	1	.....	35	.....	18	.....	.....	4 50	.....
Constantine	94	82	80	1	3	20	35	18	5	.....	1 10	.....
Coopersville	94	55	52	1	.....	55	14	13	.....	11 03	1 75	12 78
Corunna	55	.....	.....	1	1	.....	10	21	.....	28 88	2 07	30 95
Dansville	26	25	21	1	.....	25	18	18	5	.....	3 56	.....
Deerfield	32	32	.....	1	.....	32	7	.....	.....	29 48	1 24	30 72
Detroit	953	723	698	9	32	27	75	19	.....	34 57	6 40	40 97
Dexter	67	54	51	1	1	27	22	18	.....	21 00	3 11	24 11
Douglas	117	63	53	2	.....	31	37	.....	.....	.....	2 06	.....
Dundee	47	40	32	1	1	20	15	19	.....	.....	4 70	.....
East Blissfield	76	63	56	1	1	31	.....	.....	.....	.....	1 26	.....
East Hudson	94	80	70	1	1	40	43	.....	.....	.....	2 32	.....
East Saginaw	312	253	246	1	9	25	12	18	3	31 54	4 88	36 42
East Tawas	103	54	50	1	1	27	.....	.....	.....	.....	2 96	.....
Eaton Rapids	87	62	53	1	2	31	25	17	8	15 25	1 16	16 41
Edwardsburg	34	28	24	1	.....	28	12	.....	.....	.....	7 73	.....
Elk Rapids	46	38	36	1	1	38	6	.....	.....	36 80	5 77	42 57
Elsie	57	.....	.....	1	.....	.....	5	17	.....	.....	55	.....
Escanaba	62	45	41	1	1	22	1	17	.....	31 25	5 60	36 85
Essexville	46	38	30	1	.....	38	.....	.....	.....	24 46	5 13	29 59
Evart	76	58	47	1	1	29	5	17	3	.....	85	.....
Farwell	43	.....	.....	1	.....	.....	5	.....	.....	.....	3 51	.....
Ferrysburg	41	.....	29	1	.....	.....	1	.....	.....	.....	59	.....
Flint	340	236	232	1	6	33	57	17	8	19 07	5 67	24 74

TABLE XXI.—Continued.

Districts.	Enrollment in department.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Av. No. of pupils to each teacher.	No. of non-graduate pupils.	Average age of class graduated.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Fort Gratiot.....	80	65	55	1	.....	65	.....	.....	.....	.....	\$0 98	.....
Fowlerville.....	44	38	36	1	1	26	7	19	6	\$13 33	1 60	\$14 93
Frankfort.....	58	45	39	2	.....	23	3	18	4	.....	1 54	.....
Franklin No. 2.....	32	25	22	1	.....	25	1	.....	.....	.....	12 37	.....
Franklin No. 5.....	10	.....	.....	1	.....	.....	2	.....	.....	.....	3 04	.....
Galesburg.....	52	45	43	1	.....	45	31	18	.....	15 55	2 69	18 24
Gallen.....	79	72	68	1	.....	72	30	20	7	.....	1 85	.....
Gaylord.....	54	.....	22	1	.....	.....	2	.....	.....	.....	.....	.....
Gobleville.....	31	.....	25	1	.....	.....	3	.....	.....	21 60	1 30	22 90
Grand Haven.....	58	46	44	1	2	23	2	.....	.....	.....	7 56	.....
Grand Ledge.....	109	.....	65	1	1	.....	34	16	.....	.....	2 01	.....
Grand Rapids.....	748	540	517	3 2-3	16 1-2	27	145	18	9	30 30	3 75	34 05
Grass Lake.....	86	64	62	1	1	32	75	18	.....	19 50	2 24	21 74
Grayling.....	10	5	5	1	.....	5	1	.....	.....	.....	4 83	.....
Greenville.....	147	118	113	1-2	5	23	16	17	.....	25 99	3 16	29 15
Grindstone City.....	79	.....	40	1	.....	.....	1	16	.....	.....	1 33	.....
Hadley.....	64	30	.....	1	.....	30	25	18	.....	23 33	1 33	23 71
Hancock.....	87	35	33	2-3	1	21	9	18	.....	62 65	8 33	71 43
Hanover.....	52	40	36	1	.....	40	17	18	.....	.....	1 96	.....
Harbor Springs.....	53	40	33	1	.....	40	8	18	1	24 66	2 33	26 99
Hart.....	34	32	29	1	.....	32	23	.....	.....	.....	2 55	.....
Hartford.....	88	63	57	1	1	31	20	18	.....	.....	1 75	.....
Hastings.....	174	79	78	1	2	26	36	17	7	24 64	7 10	31 74
Hesperia.....	14	.....	12	1	.....	.....	.....	.....	.....	42 09	1 56	43 65
Hillsdale.....	154	119	113	1 1-2	1	43	27	18	.....	13 65	4 61	18 26
Holly.....	99	60	58	1	1	30	.....	.....	.....	.....	4 51	.....
Homer.....	63	56	.....	1	1	28	21	18	.....	.....	1 59	.....
Houghton.....	64	49	47	1	1	23	12	.....	.....	.....	20 56	.....
Hubbardston.....	42	.....	30	1	.....	.....	8	.....	.....	.....	.....	.....
Hudson.....	96	88	81	1	2	44	41	14	.....	14 17	3 73	17 90
Imlay City.....	46	45	41	1	1	22	13	18	.....	21 19	1 37	22 56
Ionia.....	187	126	122	2	4	25	99	19	5	.....	3 30	.....
Iron Mountain.....	32	24	24	1-2	1	24	.....	.....	.....	.....	10 34	.....
Ironwood.....	40	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....
Jackson No. 1.....	242	203	192	1 1-3	5 1-2	31	28	18	3	23 02	6 12	34 14
Jackson No. 17.....	56	46	43	1-2	1	23	.....	.....	.....	13 23	3 13	16 36

TABLE XXI.—Continued.

Districts.	Enrollment in department.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Av. No. of pupils to each teacher.	No. of non-graduate pupils.	Average age of class graduated.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Jonesville.....	70	55	52	2-3	1	33	30	18	-----	\$20 58	\$4 46	\$25 04
Kalamazoo.....	235	211	209	1 1-3	6	30	29	19	2	22 53	3 12	25 65
Kalkaska.....	71	41	39	1	-----	41	9	18	-----	19 75	6 14	25 89
Laingsburg.....	52	-----	-----	1	-----	-----	7	18	9	-----	2 84	-----
Lake Linden.....	37	32	32	1	1	32	-----	17	-----	62 50	7 65	70 15
Lakeview.....	80	37	34	1	-----	37	19	16	-----	17 84	2 08	19 92
L'Anse.....	36	25	21	1	1	25	-----	16	-----	-----	7 78	-----
Lansing.....	217	175	169	3	5	22	-----	17	6	26 76	6 78	33 54
Lawton.....	68	47	45	1	-----	47	17	18	-----	-----	2 27	-----
Lealie.....	127	79	74	1	1	39	39	18	-----	14 51	1 70	16 21
Linden.....	44	-----	33	1	-----	-----	8	14	-----	-----	-----	-----
Litchfield.....	47	47	45	1	1	25	28	17	-----	18 14	4 02	22 16
Lowell.....	110	79	76	1	1	39	39	17	-----	16 45	3 21	19 66
Ludington.....	84	61	57	1-3	3	21	20	-----	-----	-----	4 89	-----
Luther.....	103	57	50	1	1	30	3	-----	-----	20 18	2 07	22 25
Lyons.....	19	15	14	1	-----	15	5	-----	-----	56 73	1 84	58 57
McBride.....	48	44	37	1	-----	44	-----	18	-----	21 04	1 31	22 35
Mancelona.....	60	-----	42	1	1	-----	8	16	-----	11 00	1 00	12 00
Manchester.....	61	55	54	1	1	41	30	18	-----	-----	3 95	-----
Manistee.....	123	93	90	3	2	24	5	19	-----	-----	3 30	-----
Manistique.....	40	31	27	1	-----	31	4	-----	-----	41 61	4 54	46 16
Maple Rapids.....	58	58	50	2	-----	29	8	18	-----	-----	1 71	-----
Marcellus.....	40	33	30	1	-----	33	4	15	-----	16 35	1 58	17 93
Marine City.....	55	41	35	1	1	21	5	-----	-----	20 98	3 56	24 54
Marlette.....	94	71	54	1	-----	71	-----	-----	-----	-----	1 83	-----
Marquette.....	110	81	80	1	2 3-7	24	-----	17	6	27 35	5 69	33 04
Marshall.....	80	69	68	1 1-3	2	20	25	19	1	42 39	6 44	48 83
Mason.....	78	58	58	1	2	28	31	17	1	-----	4 21	-----
Mayville.....	78	70	57	1	-----	70	19	20	-----	13 97	1 77	15 74
Menominee.....	79	59	54	1	2	29	-----	16	-----	-----	5 58	-----
Middleville.....	56	56	-----	1	-----	56	25	18	-----	-----	3 41	-----
Milan.....	28	-----	-----	1	1	-----	5	20	-----	-----	-----	-----
Milford.....	90	69	63	9-10	3	58	32	19	1	13 35	3 04	16 39
Montague.....	35	23	22	1	1	23	8	16	-----	-----	3 74	-----
Monroe City.....	81	70	62	2-3	3	20	19	19	-----	-----	4 46	-----
Morrice.....	57	-----	-----	1	-----	-----	13	17	-----	-----	7 49	-----

TABLE XXI.—Continued.

Districts.	Enrollment in department.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Av. No. of pupils to each teacher.	No. of non-resident pupils.	Average age of class graduated.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Morley	44	32	31	1	.....	32	1	14	10	\$18 75	\$0 99	\$19 74
Mt. Clemens.....	62	51	49	1-2	1 1-2	26	25	17	6	29 46	2 97	32 43
Mt. Pleasant.....	76	57	53	3-4	1 1-2	25	19	.....	.....	26 87	4 82	31 19
Muir	29	22	20	1	.....	22	7	.....	.....	42 11	2 62	44 73
Muskegon.....	211	190	186	2	3	86	16	19	3	.....	4 42	.....
Nashville.....	62	50	46	1	1	25	17	18	.....	.....	1 92	.....
Negaunee.....	58	48	47	2	3	12	.....	18	.....	31 67	6 19	37 86
Newaygo	50	31	28	1	.....	31	12	18	6	39 51	2 20	41 71
New Baltimore.....	47	41	37	1	.....	41	2	18	.....	24 38	5 48	29 86
New Haven.....	74	.....	34	1	.....	.....	5	.....	.....	.....	1 11	.....
Niles	80	63	62	1 1-3	.....	21	11	18	.....	33 32	5 25	38 57
North Adams.....	77	74	72	1	1	37	27	17	.....	15 92	3 84	19 76
North Branch.....	63	30	.....	1	.....	30	31	.....	.....	21 66	2 26	23 92
Northport.....	51	.....	.....	1	.....	.....	3	.....	.....	8 82	1 07	9 89
Norway	51	32	31	1	1	16	.....	15	.....	30 13	6 04	26 17
Ontonagon.....	11	7	6	1	.....	7	.....	.....	.....	.....	6 14	.....
Opechee.....	34	26	26	1	.....	26	.....	14	.....	.....	1 57	.....
Orion	12	10	9	2-5	.....	10	7	.....	.....	20 00	1 24	21 24
Oscoda	48	31	28	1	1	16	.....	16	.....	.....	2 59	.....
Otsego.....	123	81	77	1	2	40	39	18	8	.....	5 19	.....
Ovid.....	58	31	28	1	1	31	38	17	6	16 84	4 00	20 84
Owosso	116	77	76	3	2	19	19	.....	.....	.....	9 38	.....
Palo.....	38	27	.....	1	.....	27	13	16	.....	30 83	1 60	32 43
Parma	59	.....	53	1	1	.....	27	19	.....	.....	.....	.....
Paw Paw.....	67	43	39	1	2	17	30	17	6	.....	3 88	.....
Petersburg	39	39	19	1	.....	39	10	11	.....	19 90	1 60	21 50
Pinckney	36	19	18	1	.....	19	21	.....	.....	32 26	9 44	41 70
Plainwell.....	34	58	56	1	1	29	27	.....	.....	.....	2 30	.....
Plymouth.....	60	50	48	1 1-4	1	32	35	17	.....	20 00	2 14	22 14
Pontiac	123	105	104	1 1-3	3	24	30	19	.....	30 00	4 13	34 13
Port Austin.....	37	29	27	1	.....	39	4	16	.....	24 14	3 31	27 45
Port Huron.....	88	69	65	1	2	23	12	19	.....	.....	4 69	.....
Portland.....	94	79	75	.....	3	31	33	19	7	.....	1 27	.....
Quincy.....	42	31	30	1	.....	31	.....	17	.....	27 42	7 84	35 26
Reading.....	54	50	33	1	50	12	17	1 96
Reed City.....	68	45	43	1	1	22	12	18	27 77	1 40	29 17

HIGH SCHOOL STATISTICS.

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TABLE XXI.—Continued.

Districts.	Enrollment in department.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Av. No. of pupils to each teacher.	No. of non-resident pupils.	Average age of class graduated.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Republic.....	45	30	25	1-2	1	25	-----	12	-----	-----	\$17 20	-----
Richmond.....	50	32	31	1	-----	32	15	18	-----	\$21 09	2 39	\$23 48
Rochester.....	90	67	62	1	1	33	15	16	4	16 84	4 50	20 84
Rockland.....	38	38	28	2	-----	19	-----	-----	-----	43 00	5 42	48 42
Romeo.....	106	87	85	1	1	44	33	18	2	-----	4 25	-----
Saginaw City.....	136	154	145	2	4	29	19	-----	-----	24 44	5 87	30 31
St. Charles.....	64	30	29	1	-----	30	18	17	-----	25 00	1 55	26 55
St. Clair.....	44	37	35	1	1	19	7	18	-----	35 37	4 79	40 16
St. Johns.....	90	74	71	1-2	2	27	31	18	4	19 22	3 40	22 62
St. Louis.....	71	41	39	1	2	14	12	-----	-----	-----	7 60	-----
Saline.....	41	31	30	1	1	17	18	18	2	38 82	3 22	42 04
Sand Beach.....	24	-----	-----	1	-----	-----	6	-----	-----	-----	-----	-----
Saranac.....	50	35	34	1	-----	35	21	-----	-----	28 44	2 65	31 09
Saugatuck.....	48	24	21	1	-----	24	1	-----	-----	-----	2 73	-----
Sault Ste. Marie....	50	35	32	1	1	25	3	17	6	-----	14 28	-----
Schoolcraft.....	104	78	65	1	1	39	18	17	-----	-----	3 52	-----
Shelby.....	66	53	-----	1	1	27	15	-----	-----	-----	1 98	-----
South Haven.....	74	62	59	1	1	30	35	19	-----	13 29	1 69	14 98
South Lyon.....	69	-----	-----	1	-----	-----	30	19	-----	-----	-----	-----
Sparta.....	51	40	35	1	-----	40	12	18	-----	-----	1 47	-----
Spring Lake.....	62	34	31	1	1	34	11	17	-----	31 40	3 07	34 47
Springport.....	47	40	31	1	-----	40	15	18	-----	30 23	2 41	32 63
Stanton.....	64	49	48	1	1	24	6	16	6	27 51	2 55	30 06
Sturgis.....	100	67	63	1	2	32	33	18	-----	-----	3 56	-----
Tawas City.....	45	45	32	1	1	45	-----	16	-----	-----	5 10	-----
Tecumseh.....	97	86	84	1	3	28	33	18	9	22 07	3 43	25 50
Three Rivers.....	78	72	70	1	3	24	15	18	4	16 25	3 46	19 71
Traverse City.....	158	82	-----	2	3	27	46	20	10	-----	3 37	-----
Trenton.....	65	46	38	1	-----	46	1	14	-----	14 13	1 20	15 33
Union City.....	101	85	71	1	3	24	-----	18	3	-----	3 00	-----
Unionville.....	39	-----	-----	1	-----	-----	4	-----	-----	-----	1 46	-----
Utica.....	43	-----	-----	1	1	-----	17	17	6	-----	2 86	-----
Vandalia.....	39	39	37	1	1	20	11	18	-----	-----	1 98	-----
Vassar.....	62	42	41	1	1	21	12	18	6	25 00	7 18	32 18
Vermontville.....	58	47	41	1	-----	47	19	17	-----	12 41	7 72	20 13
Vernon.....	58	44	43	1	-----	44	26	17	-----	15 91	1 24	17 15

SUPERINTENDENT'S REPORT.

TABLE XXI.—Continued.

Districts.	Enrollment in department.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Av. No. of pupils to each teacher.	No. of non-graduate pupils.	Average age of class graduated.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Vicksburg	101	57	55	1	1	29	37	18	.....	\$18 16	\$4 28	\$22 42
Vulcan.....	27	16	13	1	.....	16	.....	18	.....	65 91	11 62	77 53
Wayland.....	32	29	24	1	.....	29	18	.....	.....	16 80	3 25	20 05
West Bay City	99	80	74	3	1	27	8	19	.....	.....	4 98	.....
Whitehall	59	40	39	1	2-3	30	7	20	.....	24 00	5 15	29 15
White Pigeon.....	86	75	70	1	1	34	37	18	.....	.....	1 50	.....
Williamston.....	65	60	50	1	1	30	25	19	.....	17 00	1 78	18 78
Wyandotte.....	58	46	43	1	1	29	12	17	.....	27 80	5 63	33 43
Yale.....	49	43	40	1	43	33	27 21	1 63	28 84
Zilwaukee	59	1	1	3	16	3 41

GRAMMAR SCHOOL STATISTICS.

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TABLE XXII.

Statistics of Grammar Department of Two Hundred and Eighty-five Graded School Districts, compiled from reports of Superintendents and Principals for the School Year 1888-9.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Addison.....	87	33	32	.....	1	33	2	14	....	\$7 64	\$8 86	\$11 50
Adrian.....	451	353	330	5-12	11	32	15	14	....	15 57	5 56	21 18
Alaska.....	50	88	30	1	.....	38	11	....	....	9 50	1 60	11 10
Albion.....	321	215	212	.....	4	54	.....	14	2	.....	4 65	.....
Algonac.....	.....	34	32	.....	1	34	1	....	....	.....	3 86	.....
Allegan.....	256	221	212	.....	7	32	19	....	....	.....	6 51	.....
Allouez.....	37	24	19	.....	1	24	.....	9	....	28 00	10 21	38 21
Alma.....	127	102	77	.....	2	51	.....	13	....	9 31	2 14	11 45
Almont.....	70	60	55	.....	1	60	6	14	....	10 26	2 86	13 12
Alpena.....	482	303	266	1	6	46	.....	15	....	.....	14 16	.....
Ann Arbor.....	605	472	458	.....	15	33	50	14	6	12 84	3 90	16 74
Atlantic Mine.....	62	46	40	.....	1	46	3	....	....	.....	17 59	.....
Bad Axe.....	110	.....	83	.....	2	.....	.....	....	....	.....	4 85	.....
Baldwin.....	70	50	40	1	.....	50	7	....	....	20 85	2 32	23 17
Bangor No. 3 fl.....	45	35	28	1	.....	35	1	14	....	20 97	1 97	22 94
Bath.....	41	33	.....	1	.....	33	.....	....	....	.....	1 67	.....
Battle Creek.....	551	411	375	1-3	13	32	39	....	....	.....	5 05	.....
Bay City.....	1,231	662	632	.....	21 1-2	31	.....	14	7	15 90	4 12	20 02
Belding.....	90	65	54	.....	1	65	.....	....	....	.....	2 98	.....
Berlin.....	51	43	33	.....	1	43	7	12	....	18 65	63	19 23
Berrien Springs.....	79	65	65	.....	2	33	.....	14	....	9 35	3 51	12 86
Big Rapids.....	367	275	225	.....	8	34	2	....	....	12 00	3 75	15 75
Birmingham.....	102	86	.....	.....	2	43	2	13	....	.....	1 87	.....
Blissfield.....	54	43	40	.....	1	43	7	....	....	.....	2 56	.....
Boyne City.....	48	33	32	.....	1	33	4	....	....	.....	3 75	.....
Brighton.....	62	42	40	.....	1	42	10	....	....	.....	2 63	.....
Britton.....	45	35	32	1	1	35	10	12	....	.....	57	.....
Bronson.....	52	50	48	.....	1	50	2	13	....	.....	2 63	.....
Brown City.....	66	.....	40	1	.....	.....	6	13	....	.....	2 81	.....
Burr Oak.....	73	67	54	1	1	28	3	12	9	10 20	4 80	15 00
Cadillac.....	180	117	107	1 7-12	2	39	.....	14	....	14 60	5 66	20 26
Caledonia.....	76	76	61	1	1	38	16	....	....	.....	20	.....

SUPERINTENDENT'S REPORT.

TABLE XXII.—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Calumet	256	176	159	2	4	29	.....	14	2	.....	\$4 83	.....
Cannonsburg.....	38	20	14	1	.....	20	9	.....	.....	\$27 00	1 34	\$28 34
Capac.....	51	.....	43	.....	1	.....	1	.....	.....	.....	9 71	.....
Caro.....	111	91	85	.....	2 1-5	41	7	15	2	.....	7 50	.....
Carrollton	49	32	.....	1	.....	32	.....	9	.....	.....	3 00	.....
Carson City.....	120	.....	.....	.....	2	.....	5	.....	.....	.....	1 37	.....
Carsonville.....	67	.....	26	1	.....	.....	.....	.....	.....	.....	85	.....
Caseville.....	84	64	34	1	1	32	4	16	.....	.....	1 27	.....
Cass City.....	48	48	40	1	.....	46	.....	14	.....	7 07	2 20	9 27
Cedar Springs.....	.....	.....	.....	.....	1	.....	7	.....	.....	.....	4 17	.....
Centreville.....	74	59	53	1	1	30	4	14	1	11 11	4 51	15 62
Central Mine.....	67	56	46	.....	1	56	.....	10	.....	.....	61	.....
Champion.....	95	.....	.....	.....	2	.....	.....	.....	.....	.....	14 03	.....
Charlevoix.....	94	72	66	.....	2	36	2	14	2	.....	3 63	.....
Charlotte	326	248	242	.....	6	41	33	14	6	12 81	6 11	18 92
Cheboygan.....	102	80	76	2	.....	40	.....	14	.....	12 42	2 10	14 52
Chelsea.....	104	100	90	.....	2	50	6	.....	.....	.....	3 32	.....
Clinton.....	74	64	48	.....	2	32	6	15	.....	.....	1 48	.....
Clio.....	50	45	33	.....	1	45	1	13	.....	.....	1 14	.....
Coldwater	384	315	303	1-3	8	39	20	15	.....	12 29	4 03	16 32
Concord.....	41	31	.....	1	.....	31	.....	14	.....	.....	4 50	.....
Constantine.....	99	60	59	.....	2	30	.....	11	.....	.....	1 10	.....
Coopersville	51	35	30	.....	1	35	.....	.....	.....	.....	1 75	.....
Coral.....	79	66	45	1	.....	66	2	.....	.....	13 83	1 25	15 08
Corunna	171	.....	154	.....	14	.....	15	.....	.....	7 72	2 07	9 79
Crosswell.....	87	52	52	1	.....	52	2	.....	.....	19 46	1 53	20 99
Dansville	46	31	23	.....	1	31	4	12	9	.....	3 56	.....
Davison.....	90	90	45	.....	1	90	13	.....	.....	6 35	38	6 73
Dearborn	78	78	51	1	.....	78	.....	14	.....	12 29	50	12 79
Deerfield.....	60	60	.....	.....	2	30	8	.....	.....	.....	1 24	.....
Detroit	6,087	4,713	4,497	12	131	33	25	15	.....	18 86	6 40	25 26
Dexter	79	61	58	.....	2	30	7	15	.....	12 50	3 11	15 61
Douglas.....	56	34	31	.....	1	34	13	.....	.....	.....	2 06	.....
Dryden.....	54	45	41	1	.....	45	9	.....	.....	22 84	38	23 22
Dundee	103	94	81	.....	2	47	3	14	.....	.....	4 70	.....
East Blissfield.....	41	35	32	1	35	1 26
East Holland.....	70	50	1	3	14

GRAMMAR SCHOOL STATISTICS.

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TABLE XXII.—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
East Hudson	43	38	35	.....	1	38	1	.....	.....	.....	\$2 82	.....
Eastlake	107	58	56	1	1	30	.....	.....	.....	\$14 20	2 75	\$16 95
East Saginaw	1,432	1,094	1,057	5	24	38	30	14	9	15 53	4 88	20 41
East Tawas	150	88	79	.....	2	44	.....	.....	.....	.....	2 96	.....
Eaton Rapids	220	124	102	.....	4	31	3	13	6	12 00	1 16	13 16
Ecorse	85	52	42	1	.....	52	.....	.....	.....	8 80	1 55	10 35
Edwardsburg	32	25	23	.....	1	25	4	.....	.....	.....	7 73	.....
Elk Rapids	102	79	42	.....	3	26	2	.....	.....	15 98	5 77	21 75
Elm Hall	57	35	28	1	.....	35	9	11	4	12 57	1 30	13 87
Elsie	35	.....	.....	.....	1	.....	2	.....	.....	.....	55	.....
Escanaba	181	126	115	.....	3	42	.....	14	.....	12 50	5 60	18 10
Essexville	144	89	66	.....	2	44	.....	.....	.....	.....	5 13	.....
Ewart	167	149	84	.....	1	149	2	.....	.....	.....	85	.....
Farwell	51	.....	.....	.....	1	.....	2	.....	.....	.....	3 51	.....
Ferrysburg	49	.....	37	.....	1	.....	2	.....	.....	.....	59	.....
Filer No. 1	55	54	.....	1	.....	54	.....	.....	.....	19 24	3 38	27 62
Fint	928	472	465	.....	12 1-2	38	17	13	3	11 48	5 67	17 15
Fort Gratiot	126	114	92	.....	3	38	.....	.....	.....	.....	93	.....
Fowlerville	77	71	62	.....	2	35	1	15	.....	11 00	1 60	12 60
Frankfort	122	120	88	.....	3	40	1	.....	.....	.....	1 54	.....
Franklin No. 1	50	28	23	.....	1	28	.....	.....	.....	25 60	2 63	28 23
Franklin No. 2	49	34	32	.....	1	34	.....	11	.....	.....	12 37	.....
Franklin No. 5	38	.....	.....	1 1-3	.....	.....	3	15	.....	.....	3 04	.....
Galesburg	63	55	51	.....	1	55	13	14	.....	.....	2 69	.....
Galien	37	35	32	.....	2	18	1	.....	.....	.....	1 35	.....
Gaylord	60	.....	23	1	.....	.....	2	.....	.....	.....	.....	.....
Gobleville	43	.....	35	.....	1	.....	2	.....	.....	5 32	1 30	7 12
Graafschap	60	.....	.....	1	.....	.....	.....	.....	.....	.....	1 22	.....
Grand Haven	399	264	250	.....	7	38	1	.....	.....	.....	7 56	.....
Grand Ledge	58	41	36	.....	1	41	11	13	.....	.....	2 01	.....
Grand Rapids	2,917	2,370	2,237	1 1-3	53 1-2	39	49	14	6	15 34	3 75	19 09
Grass Lake	54	46	40	.....	1	46	4	14	.....	9 60	2 24	11 84
Grayling	53	42	42	.....	1	42	2	.....	.....	.....	4 33	.....
Greenland No. 2	27	27	19	1	.....	27	.....	.....	.....	43 33	4 33	48 15
Greenville	234	223	209	1-3	5	45	10	13	.....	10 40	3 16	13 56
Grindstone City	64	.....	42	.....	1	.....	.....	.....	.....	.....	1 33	.....
Grosse Isle	66	.....	43	1	2	.....	.....	.....	.....	.....	.....	.....

SUPERINTENDENT'S REPORT.

TABLE XXII.—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Hadley.....	26	26	24	.....	1	26	9	.....	.....	.....	1 83	.....
Hancock.....	169	127	124	1-6	3	38	3	.....	.....	14 23	8 83	23 06
Hanover.....	60	53	45	.....	2	26	7	14	.....	.....	1 96	.....
Harbor Springs.....	65	50	48	.....	1	50	.....	15	9	.....	2 38	.....
Harrisville.....	68	88	46	1	1	44	.....	12	.....	.....	2 12	.....
Hart.....	88	72	58	.....	2	36	5	18	6	.....	2 55	.....
Hartford.....	108	83	73	.....	2	41	5	14	.....	.....	1 75	.....
Hastings.....	225	178	165	1	3	44	7	14	.....	7 30	7 10	14 40
Hesperia.....	98	.....	82	1	1	.....	1	15	.....	.....	1 56	.....
Highland Station...	76	70	.....	1	.....	70	6	.....	.....	.....	1 67	.....
Hillsdale.....	288	229	198	1	5	38	9	13	6	11 00	4 61	15 61
Holly.....	152	93	87	.....	2	46	.....	14	.....	.....	4 51	.....
Homer.....	75	73	.....	1	.....	73	7	.....	.....	.....	1 59	.....
Houghton.....	79	70	67	.....	3	23	1	.....	.....	.....	20 56	.....
Hubbardston.....	47	.....	34	.....	1	.....	2	13	.....	.....	.....	.....
Hudson.....	166	97	90	.....	2	48	7	11	6	11 12	3 73	14 85
Imlay City.....	122	87	80	.....	2	43	6	13	.....	6 55	1 37	7 92
Ionia.....	394	247	240	2	4	40	34	.....	.....	.....	3 80	.....
Iron Mountain.....	275	158	140	1-2	4	35	.....	.....	.....	.....	10 34	.....
Ironwood.....	344	.....	.....	.....	4	.....	.....	13	.....	.....	.....	.....
Ishpeming No. 1....	41	36	23	.....	1	36	.....	.....	.....	16 66	3 48	20 09
Jackson No. 1.....	588	435	415	1-3	13 1-2	36	25	.....	.....	16 04	6 12	22 16
Jackson No. 17.....	290	230	216	1	7	32	.....	.....	.....	12 30	3 13	15 43
Jamestown.....	31	27	21	1	.....	27	2	.....	.....	24 87	1 84	26 71
Jonesville.....	99	76	70	1-6	2	38	9	13	6	11 38	4 46	16 34
Kalamazoo.....	1,127	658	637	1-3	17	39	13	15	3	12 32	3 12	15 44
Kalkaska.....	129	65	56	.....	2	32	3	.....	.....	11 48	6 14	17 62
Laingsburg.....	29	.....	.....	.....	1	.....	6	.....	.....	.....	2 84	.....
Lake Linden.....	272	182	.....	.....	6	30	.....	.....	.....	15 93	7 65	23 58
Lakeview.....	145	73	69	.....	2	36	2	12	.....	8 42	2 08	10 50
L'Anse.....	105	80	66	.....	2	40	.....	11	.....	.....	7 78	.....
Lansing.....	360	538	501	.....	13	41	.....	14	3	11 65	6 78	18 43
Lawton.....	53	42	38	.....	2	21	4	13	.....	.....	2 27	.....
Leslie.....	150	98	93	.....	2	49	2	15	.....	6 12	1 70	7 82
Linden.....	43	.....	33	.....	1	.....	3	11	.....	.....	.....	.....
Lisbon.....	54	41	40	1	41	17	17	22 27	1 60	23 87
Litchfield.....	51	51	35	1	51	9 20	4 02	13 22

GRAMMAR SCHOOL STATISTICS.

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TABLE XXII.—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Lowell	246	232	225	1	4	45	4	13	.....	\$5 00	\$8 21	\$8 21
Ludington	413	274	258	1	6	89	6	.....	.....	.....	4 89	.....
Luther	96	56	49	.....	1	56	.....	.....	.....	7 14	2 07	9 21
Lyons	61	51	49	.....	1 1-2	34	3	.....	.....	.....	1 84	.....
McBride	50	45	40	1	.....	45	.....	12	.....	6 25	1 31	7 56
Mackinaw City	43	42	31	.....	1	42	3	.....	.....	9 64	88	10 52
Mancelona	140	.....	127	.....	3	.....	6	13	.....	4 15	1 00	5 15
Manchester	104	80	73	.....	2	40	5	14	.....	.....	3 95	.....
Manistee	871	471	450	4	11	40	5	14	.....	.....	3 30	.....
Manistique	130	102	96	.....	2	51	2	13	.....	.....	4 54	.....
Maple Rapids	48	48	44	.....	1	48	2	.....	.....	.....	1 71	.....
Marcellus	94	73	65	1	1	36	3	.....	.....	7 80	1 58	9 38
Marine City	69	57	54	.....	2	28	1	.....	.....	8 68	3 56	12 24
Marlette	103	72	57	.....	2	36	.....	.....	.....	.....	1 88	.....
Marquette	433	265	316	.....	6	61	3	12	9	10 98	5 69	16 67
Marshall	291	206	202	.....	7	29	15	15	3	15 71	6 44	22 15
Marysville	43	25	25	.....	1	25	.....	.....	.....	23 88	2 16	23 04
Mason	205	139	130	.....	3	46	16	.....	.....	.....	4 21	.....
Mattawan	58	48	43	1	.....	48	.....	.....	.....	15 70	1 92	17 62
Mayville	60	50	38	.....	1	50	6	.....	.....	.....	1 77	.....
Menominee	329	209	199	.....	7	30	.....	.....	.....	.....	5 58	.....
Michigamme	63	46	42	2	.....	23	.....	.....	.....	.....	7 44	.....
Middleville	62	62	.....	.....	1	62	7	14	.....	.....	3 41	.....
Milford	143	113	102	1-10	2 7-10	40	19	13	6	7 84	3 04	10 38
Montague	183	62	59	.....	2	31	.....	14	.....	.....	3 74	.....
Monroe City	211	149	135	1-6	4	36	42	15	.....	.....	4 46	.....
Morrice	30	.....	.....	.....	1	.....	5	.....	.....	.....	2 49	.....
Morley	55	43	36	.....	1	43	3	11	.....	6 10	99	7 09
Mt. Clemens	241	160	151	1 1-6	3	39	7	.....	.....	9 35	2 97	12 32
Mt. Morris	59	59	35	1	.....	59	1	.....	.....	12 38	1 41	13 79
Mt. Pleasant	136	104	96	.....	2 1-2	42	3	15	1	10 53	4 32	15 35
Muir	92	74	69	.....	2	37	3	13	.....	.....	2 62	.....
Muskegon	778	715	588	1	19	36	6	12	3	.....	4 42	.....
Nashville	98	90	82	.....	2	45	6	14	.....	.....	1 92	.....
National Mine	33	24	20	1	.....	24	.....	.....	.....	50 72	17 96	68 68
Negaunee	165	120	108	.....	4	30	.....	14	.....	14 67	6 19	20 86

TABLE XXII.—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Newaygo.....	100	78	.....	.....	2	50	5	.....	.....	.....	\$2 20	.....
New Baltimore.....	44	36	32	.....	1	36	.....	12	3	\$6 86	5 48	\$12 34
Newbury.....	42	23	21	1	.....	22	.....	.....	.....	46 98	7 12	54 10
New Haven.....	54	.....	34	.....	1	.....	.....	.....	.....	.....	1 11	.....
New Hudson.....	29	24	.....	1	.....	24	.....	.....	.....	26 97	1 84	28 81
New Troy.....	46	.....	29	1	.....	.....	5	18	.....	.....	.....	.....
Niles.....	246	198	187	1-3	5	38	12	.....	.....	12 21	5 25	17 46
North Adams.....	45	42	.....	.....	1	42	1	18	.....	10 15	3 84	13 99
North Branch.....	70	50	37	.....	1	50	3	14	.....	6 00	2 26	8 26
Northport.....	48	.....	.....	.....	1	.....	1	.....	.....	6 56	1 07	7 63
Norway.....	120	70	64	.....	2	35	.....	19	.....	15 73	6 04	21 77
Okemos.....	48	.....	41	1	.....	.....	.....	.....	.....	.....	1 07	.....
Onondaga.....	50	42	40	1	.....	42	4	.....	.....	18 27	1 33	19 60
Ontonagon.....	87	63	48	.....	2	31	.....	.....	.....	.....	6 14	.....
Opechee.....	128	106	90	2	1	33	.....	10	.....	.....	1 57	.....
Orion.....	58	32	29	3-5	2-3	25	5	15	.....	18 83	1 24	15 07
Ortonville.....	80	62	45	1	.....	62	18	.....	.....	15 51	2 71	18 22
Oscoda.....	129	99	63	.....	2	50	3	13	.....	.....	2 59	.....
Osseo.....	52	58	25	1	.....	58	.....	.....	.....	11 45	80	12 25
Otsego.....	119	91	86	.....	2	45	3	.....	.....	.....	5 19	.....
Otter Lake.....	56	40	33	1	.....	40	3	.....	.....	12 37	1 53	13 90
Ovid.....	102	72	66	.....	2	36	.....	13	.....	12 32	4 00	16 32
Owosso.....	373	239	223	.....	5	48	10	.....	.....	.....	9 38	.....
Palo.....	25	25	21	1	.....	25	.....	.....	.....	.....	1 60	.....
Parma.....	85	.....	85	.....	1	.....	14	.....	.....	.....	.....	.....
Paris No. 1.....	68	68	.....	1	.....	68	.....	.....	.....	15 73	1 33	17 16
Paris.....	47	47	33	1	.....	47	7	17	.....	17 07	1 55	18 62
Paw Paw.....	176	134	128	.....	3	45	23	14	6	.....	3 88	.....
Petersburg.....	41	41	18	.....	1	41	.....	10	.....	.....	1 60	.....
Pierson.....	44	44	41	1	.....	44	.....	.....	.....	15 45	1 37	16 82
Pinckney.....	79	57	52	1	.....	57	5	15	.....	6 79	9 44	16 23
Pinnebog.....	48	.....	37	1	.....	.....	1	.....	.....	.....	.....	.....
Plainwell.....	180	142	133	.....	4	35	11	.....	.....	.....	2 30	.....
Plymouth.....	125	90	85	1-16	2	45	10	15	.....	3 25	2 14	10 39
Pontiac.....	335	287	232	1 1-3	6 1-2	37	23	15	6	13 51	4 13	17 64
Port Austin.....	43	36	32	.....	1	36	.....	.....	.....	.....	3 31	.....

TABLE XXII.—Continued.

Districts.	Enrollment in department.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Av. No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Port Crescent.....	44	88	-----	1	-----	88	-----	-----	-----	\$23 02	\$2 10	\$25 12
Port Hope	89	87	27	1	-----	87	5	12	-----	16 22	1 81	18 08
Port Huron.....	602	862	830	-----	12	80	9	15	-----	-----	4 89	-----
Portland.....	181	108	102	-----	8	86	1	-----	-----	-----	1 27	-----
Port Sanilac.....	50	45	83	1	-----	45	-----	-----	-----	15 68	1 28	16 91
Powers.....	42	42	21	1	-----	42	-----	-----	-----	22 14	2 78	24 87
Quincy, No. 1.....	66	37	35	-----	1	37	-----	13	-----	13 51	7 84	21 35
Reading.....	97	90	85	-----	2	45	-----	12	-----	-----	1 96	-----
Reed City.....	126	90	85	-----	2	45	-----	14	-----	7 70	1 40	9 10
Republic.....	175	75	60	1-4	2	38	-----	10	-----	-----	17 20	-----
Richmond	84	80	29	-----	1	80	1	12	-----	9 00	2 89	11 89
Rochester.....	64	55	49	-----	1	55	3	12	-----	5 82	4 50	10 32
Rockland.....	75	75	69	-----	2	87	-----	-----	-----	11 86	5 42	17 28
Rogers City.....	64	-----	37	1	-----	-----	-----	-----	-----	-----	-----	-----
Romeo	141	81	78	-----	3	27	18	13	6	-----	4 25	-----
Saginaw City.....	882	763	729	2	16	40	15	-----	-----	13 97	5 87	19 84
St. Charles.....	64	40	30	-----	1	40	4	13	-----	19 40	1 55	20 95
St. Clair.....	191	149	136	1	8	43	12	15	-----	21 19	4 79	25 98
St. Johns.....	216	171	158	1-4	4	43	20	16	-----	11 78	3 40	15 18
St. Louis.....	379	182	158	1	4	38	4	-----	-----	-----	7 00	-----
Salem	48	31	26	1	-----	31	15	16	-----	11 61	1 91	13 52
Saline.....	101	79	76	-----	2	39	18	14	-----	21 19	3 22	24 41
Sand Beach.....	91	-----	-----	-----	2	-----	1	13	-----	-----	3 22	-----
Saranac.....	80	72	68	1	1	36	7	-----	-----	-----	2 65	-----
Saugatuck No. 2....	129	75	68	-----	2	33	2	-----	-----	-----	2 78	-----
Sault Ste. Marie....	231	130	121	-----	3	43	1	13	-----	-----	14 26	-----
Schoolcraft.....	94	78	71	-----	2	39	8	-----	-----	-----	8 52	-----
Shaftsbury.....	29	29	22	1	-----	29	-----	10	-----	15 23	95	16 23
Shelby	101	72	-----	-----	1	72	5	-----	-----	-----	1 98	-----
South Haven.....	158	139	103	-----	2	69	5	14	-----	9 63	1 69	11 32
South Lyon.....	80	-----	-----	-----	2	-----	11	-----	-----	-----	-----	-----
Sparta.....	45	30	27	-----	1	30	4	-----	-----	-----	1 47	-----
Spring Lake.....	203	163	158	1	2 1-2	47	3	14	-----	17 70	3 07	20 77
Springport.....	34	20	19	-----	1	20	4	16	-----	-----	2 41	-----
Standish	57	-----	40	1	-----	-----	-----	-----	-----	-----	-----	-----
Stanton	72	54	51	-----	2	27	8	13	5	12 96	2 55	15 51

SUPERINTENDENT'S REPORT.

TABLE XXII.—Continued.

Districts.	Enrollment in department.	Average No. belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Av. No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Stephenson.....	54	82	81	1	-----	32	1	15	----	\$31 70	\$1 90	\$33 60
Sturgis.....	309	183	162	-----	4	46	14	-----	-----	8 56	-----	-----
Sutton's Bay.....	43	24	14	1	-----	24	-----	-----	-----	21 21	2 27	23 48
Tawas City.....	42	42	33	-----	1	42	-----	-----	-----	5 10	-----	-----
Tecumseh	170	142	138	-----	4	35	6	14	----	20 41	3 43	23 84
Thornville	38	31	28	1	-----	31	-----	-----	-----	22 96	5 76	28 72
Three Rivers No. 1.	125	125	115	-----	3	42	7	13	----	12 32	3 46	15 78
Traverse City.....	208	162	-----	-----	4	40	18	-----	-----	8 37	-----	-----
Trenton.....	35	45	44	-----	1	45	-----	11	----	13 94	1 20	15 14
Trufant.....	53	53	33	-----	1	53	2	-----	-----	7 41	1 39	8 80
Union City.....	132	125	113	-----	3	42	-----	-----	-----	8 00	-----	-----
Unionville.....	33	-----	26	-----	1	-----	-----	-----	-----	1 46	-----	-----
Utica.....	53	-----	55	1	1	-----	-----	-----	-----	2 36	-----	-----
Vandalia.....	33	33	31	-----	1	33	3	-----	-----	1 96	-----	-----
Vassar.....	124	77	71	-----	2	39	7	14	2	22 12	7 18	29 30
Vermontville.....	43	33	35	-----	1	38	4	14	----	10 52	7 72	18 24
Vernon.....	70	50	46	-----	1 1-2	34	5	13	----	19 46	1 24	20 70
Vicksburg	118	70	67	-----	2	35	5	14	----	17 93	4 26	22 24
Vriesland.....	49	45	34	1	-----	45	-----	16	----	16 93	1 18	18 11
Vulcan.....	60	33	32	-----	1	33	-----	14	----	-----	11 63	-----
Wayland	41	32	-----	-----	1	32	5	-----	-----	15 29	3 25	18 54
Wayne.....	73	53	43	1	-----	53	1	14	----	16 33	1 50	18 33
West Bay City.....	1,071	578	516	2	12	41	22	-----	-----	4 98	-----	-----
Whitehall	174	139	132	-----	3 1-3	41	-----	13	----	20 37	5 15	26 02
White Pigeon.....	50	42	40	-----	1	42	13	-----	-----	1 50	-----	-----
Williamston.....	100	35	30	1	1	42	-----	12	----	15 70	1 73	17 43
Wyandotte	124	93	87	-----	3	33	7	-----	-----	20 61	5 63	26 24
Yale.....	141	101	87	-----	2	50	2	-----	-----	1 63	-----	-----
Zeeland	146	97	86	1	1	43	-----	14	----	9 07	1 62	10 69
Zilwaukee.....	35	-----	-----	-----	1	-----	-----	-----	-----	3 41	-----	-----

TABLE XXIII.

Statistics of the Primary Department of Two Hundred and Seventy-nine Graded School Districts Compiled from the Reports of Superintendents and Principals for the School Year 1888-9.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. Age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Addison.....	48	42	85	.....	1	42	.....	.....	.....	\$4 71	\$3 86	\$8 57
Adrian.....	827	534	491	1-13	15	36	4	11	.....	10 24	5 56	15 80
Alaska.....	35	30	20	.....	1	30	.....	.....	.....	6 40	1 60	8 00
Albion.....	485	262	248	.....	7	37	.....	10	.....	.....	4 65	.....
Algonac.....	.....	110	91	.....	2	45	.....	.....	.....	.....	3 38	.....
Allegan.....	365	298	275	.....	8	37	.....	.....	.....	.....	6 51	.....
Allouez.....	50	32	25	.....	1	32	.....	.....	.....	26 44	10 21	36 65
Alma.....	314	254	182	.....	5	51	.....	10	6	6 50	2 14	8 64
Almont.....	115	160	90	.....	2	50	4	9	6	10 36	2 86	13 22
Alpena.....	1,365	743	713	.....	19	39	.....	9	6	.....	14 16	.....
Ann Arbor.....	864	643	617	.....	16	39	51	10	6	11 84	3 90	15 74
Atlantic Mine.....	113	84	73	.....	1	84	2	.....	.....	.....	17 59	.....
Bad Axe.....	73	73	55	.....	1	73	.....	.....	.....	.....	4 85	.....
Baldwin.....	89	63	49	.....	1	63	7	.....	.....	15 20	2 32	17 52
Bangor.....	43	32	26	.....	1	32	.....	10	.....	16 43	1 97	18 40
Bath.....	39	39	25	.....	1	39	.....	.....	.....	.....	1 67	.....
Battle Creek.....	1,242	875	813	1-3	24	37	.....	.....	.....	.....	5 05	.....
Bay City.....	4,300	2,071	1,951	2	47 1-2	42	5	11	4	9 20	4 12	13 32
Belding.....	103	69	53	.....	1	69	.....	.....	.....	.....	2 98	.....
Berlin.....	47	45	35	.....	1	45	.....	.....	.....	14 18	63	14 81
Berrien Springs....	63	50	50	.....	1	50	.....	8	.....	6 45	3 51	9 96
Big Rapids.....	966	665	500	.....	12	55	.....	.....	.....	7 00	3 75	10 75
Birmingham.....	133	120	.....	.....	2	60	3	9	.....	.....	1 87	.....
Blissfield.....	53	37	33	.....	1	37	.....	.....	.....	.....	2 56	.....
Boyne City.....	61	43	34	.....	1	43	1	.....	.....	.....	3 75	.....
Brighton.....	104	74	70	.....	2	37	.....	.....	.....	.....	2 63	.....
Britton.....	60	42	42	.....	1	42	.....	7	6	.....	57	.....
Bronson.....	171	171	151	.....	3	57	1	9	.....	.....	2 63	.....
Brown City.....	70	.....	50	.....	1	.....	3	8	.....	.....	2 81	.....

SUPERINTENDENT'S REPORT.

TABLE XXIII.—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Burr Oak.....	109	81	78	.....	2	40	4	9	.....	5 55	4 80	10 35
Cadillac.....	822	502	463	.....	12	42	.....	11	5	12 09	5 66	17 75
Caledonia.....	69	69	52	.....	1	69	.....	.....	.....	.....	20	.....
Calumet.....	1,978	1,458	1,298	2	23	58	8	10	6	.....	4 83	.....
Cannonsburg.....	54	40	30	.....	1	40	.....	.....	.....	4 50	1 34	5 84
Capac.....	67	.....	46	.....	1	.....	1	.....	.....	.....	9 71	.....
Caro.....	378	250	242	.....	5	50	6	11	9	.....	7 50	.....
Carrollton No. 2.....	83	55	46	.....	1	55	8	.....	.....	.....	3 00	.....
Carson City.....	140	.....	.....	.....	3	.....	.....	.....	.....	.....	1 37	.....
Carsonville.....	104	.....	41	.....	1	.....	.....	.....	.....	.....	85	.....
Caseville.....	96	89	65	.....	2	44	.....	10	.....	.....	1 27	.....
Cass City.....	194	120	100	.....	2	60	.....	10	6	5 20	2 20	7 40
Centerville.....	110	79	75	.....	2	40	.....	10	.....	8 86	4 51	13 37
Central Mine.....	87	81	57	.....	1	81	.....	7	.....	.....	61	.....
Champion.....	296	.....	.....	.....	6	.....	.....	.....	.....	.....	14 08	.....
Charlevoix.....	214	141	133	.....	3	47	.....	10	6	.....	3 63	.....
Charlotte.....	643	396	363	.....	11	36	5	11	.....	12 50	6 11	18 31
Cheboygan.....	263	140	134	.....	4	35	.....	12	.....	9 55	2 10	11 65
Chelsea.....	170	160	146	.....	4	40	.....	.....	.....	.....	3 32	.....
Clinton.....	120	106	101	.....	2	53	2	9	.....	.....	1 48	.....
Clio.....	73	64	55	.....	1	64	2	10	.....	.....	1 14	.....
Coldwater.....	603	463	435	1-3	9 1-3	50	3	10	6	8 99	4 03	13 02
Concord.....	110	80	.....	.....	3	30	.....	12	.....	.....	4 50	.....
Constantine.....	154	85	83	.....	2	42	.....	.....	.....	.....	1 10	.....
Coopersville.....	139	84	67	.....	2	42	.....	8	.....	.....	1 75	.....
Coral.....	84	70	51	.....	1	70	1	10	.....	11 25	1 25	12 50
Corunna.....	168	.....	131	.....	3	.....	.....	.....	.....	5 24	2 07	7 31
Croswell.....	124	93	93	.....	2	46	.....	12	.....	.....	1 53	.....
Dansville.....	91	75	63	.....	2	38	.....	9	1	.....	3 56	.....
Davison.....	84	84	.....	.....	1	84	2	.....	.....	5 70	38	6 08
Dearborn.....	120	120	55	.....	1	120	.....	.....	.....	7 23	50	7 73
Deerfield.....	73	73	.....	.....	2	36	.....	.....	.....	.....	1 24	.....
Detroit.....	16,879	12,534	11,727	1	271	46	.....	10	6	12 26	6 40	18 66
Dexter.....	131	94	88	.....	3	31	.....	11	.....	9 45	3 11	12 56
Douglas.....	48	48	42	1	48	2 06
Dryden.....	99	89	76	2	44	4	33

PRIMARY SCHOOL STATISTICS.

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TABLE XXIII.—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Dundee	186	180	114	.....	3	53	1	11	.....	.....	\$4 70	.....
East Blissfield	84	75	73	.....	1	75	.....	.....	.....	.....	1 26	.....
East Holland	30	.....	20	.....	1	.....	1	.....	.....	.....	.....	.....
East Hudson	52	48	48	.....	1	48	1	.....	.....	.....	2 82	.....
Eastlake	136	97	86	.....	1	97	3	.....	.....	\$8 47	2 75	\$11 23
East Saginaw	3,289	2,871	2,262	1	56	42	3	10	7	10 48	4 88	15 86
East Tawas	357	191	175	.....	3	48	.....	.....	.....	.....	2 96	.....
Eaton Rapids	286	197	174	.....	4	49	3	9	5	8 22	1 16	9 88
Ecorse	115	74	56	.....	1	74	.....	.....	.....	3 35	1 55	4 90
Edwardsburg	64	53	44	.....	1	53	.....	.....	.....	.....	7 73	.....
Elk Rapids	196	134	129	.....	4	34	.....	.....	.....	12 74	5 77	18 51
Elm Hall	53	.....	36	.....	1	.....	.....	.....	.....	.....	1 30	.....
Elsie	125	.....	.....	.....	2	.....	.....	.....	.....	.....	55	.....
Escanaba	574	310	279	.....	7	44	.....	10	.....	8 53	5 60	14 13
Esserville	297	138	132	.....	2	69	.....	.....	.....	.....	5 13	.....
Ewart	319	269	171	.....	4	67	.....	.....	.....	.....	85	.....
Farwell	90	.....	.....	.....	1	.....	.....	.....	.....	.....	3 51	.....
Ferrysburg	80	.....	53	.....	1	.....	7	7	.....	.....	59	.....
Filer No. 1	53	26	.....	.....	1	26	.....	.....	.....	15 79	8 38	24 17
Flint	1,206	712	704	.....	18 1-2	38	1	9	6	8 12	5 67	13 79
Fort Gratiot	363	310	225	.....	3	109	.....	.....	.....	.....	93	.....
Fowlerville	151	110	103	.....	3	36	.....	11	.....	8 54	1 60	10 14
Frankfort	215	214	132	.....	3	71	.....	.....	.....	.....	1 54	.....
Franklin No. 1	86	56	45	.....	1	56	.....	.....	.....	15 77	2 68	18 45
Franklin No. 2	75	53	47	.....	1	53	.....	8	.....	.....	12 37	.....
Franklin No. 5	105	.....	.....	1-3	1	.....	15	11	1	.....	3 04	.....
Galesburg	78	67	60	.....	2	33	6	10	.....	.....	2 69	.....
Gallen	71	64	63	.....	1	64	.....	.....	.....	.....	1 39	.....
Gaylord	64	.....	32	.....	1	.....	.....	.....	.....	.....	.....	.....
Gobleville	51	.....	40	.....	1	.....	2	.....	.....	5 61	1 30	6 91
Graafschap	65	.....	.....	.....	1	.....	.....	.....	.....	.....	1 22	.....
Grand Haven	1,065	635	641	1	13	49	.....	.....	.....	.....	7 56	.....
Grand Ledge	86	.....	45	.....	1	.....	.....	11	.....	.....	2 01	.....
Grand Rapids	8,948	4,992	4,727	1	132	38	.....	10	9	12 27	3 75	16 02
Grass Lake	110	95	94	.....	2	45	2	10	.....	9 11	2 24	11 35
Grayling	180	120	108	.....	2	60	.....	.....	.....	.....	4 83	.....

TABLE XXIII—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class pro- moted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Greenland No. 2....	22	22	16	.....	1	22	.....	.....	.....	.....	\$4 82	.....
Greenville.....	458	324	309	1-6	6 2-3	49	1	9	.....	\$9 91	3 16	\$13 07
Grindstone City....	107	.....	49	.....	1	.....	.....	.....	.....	.....	1 33	.....
Grosse Isle.....	49	.....	29	.....	1	.....	.....	.....	.....	.....	.....	.....
Hadley.....	34	34	27	.....	1	34	.....	.....	.....	.....	1 83	.....
Hancock.....	402	247	228	1 1-6	6	83	1	.....	.....	11 86	8 83	20 19
Hanover.....	69	60	54	.....	1	60	1	9	.....	.....	1 96	.....
Harbor Springs....	101	90	86	.....	2	45	.....	11	9	.....	2 33	.....
Harrisville.....	118	100	49	1	2	83	.....	.....	.....	.....	2 12	.....
Hart.....	93	60	.....	.....	1	60	2	.....	.....	.....	2 55	.....
Hartford.....	140	97	83	.....	1	97	2	8	.....	.....	1 75	.....
Hastings.....	408	308	277	.....	6	51	.....	10	.....	7 51	7 10	14 61
Hesperia.....	162	154	110	.....	2	77	2	10	.....	.....	1 56	.....
Highland Station ..	54	54	40	.....	1	54	.....	12	.....	.....	1 67	.....
Hillsdale.....	444	292	275	.....	8	36	.....	9	.....	10 88	4 61	15 49
Holly.....	202	134	121	.....	3	45	.....	12	.....	.....	4 51	.....
Homer.....	161	153	98	.....	3	51	.....	.....	.....	.....	1 59	.....
Houghton.....	347	255	238	.....	9	26	2	.....	.....	.....	20 56	.....
Hubbardston.....	49	.....	39	.....	1	.....	.....	11	.....	.....	.....	.....
Hudson.....	150	125	117	.....	3	41	3	8	.....	11 45	3 73	15 18
Imlay City.....	302	175	161	.....	4	44	2	9	.....	4 39	1 37	5 76
Ionia.....	792	441	.....	.....	12	37	.....	.....	.....	.....	3 80	.....
Iron Mountain.....	917	543	472	1-4	10	54	.....	.....	.....	.....	10 34	.....
Ironwood.....	474	.....	300	1	4	.....	.....	7	.....	.....	.....	.....
Ishpeming No. 1....	51	46	26	.....	1	46	.....	9	.....	8 70	2 68	11 38
Jackson No. 1.....	1,459	918	848	1-3	23	40	23	.....	.....	12 07	6 12	18 19
Jackson No. 17.....	1,136	924	850	.....	12	75	.....	.....	.....	29 95	3 13	33 08
Jamestown Centre..	63	52	49	.....	1	52	.....	.....	.....	11 11	1 84	12 95
Jonesville.....	139	85	81	1-6	2	43	3	10	.....	11 64	4 46	16 10
Kalamazoo.....	2,552	1,574	1,475	1-3	38	42	3	11	6	9 14	3 12	12 28
Kalkaska.....	208	111	100	.....	3	37	.....	.....	.....	8 06	6 14	14 20
Lalingsburg.....	121	.....	.....	.....	2	.....	9	.....	.....	.....	2 84	.....
Lake Linden.....	625	485	422	.....	11	43	.....	.....	.....	8 85	7 65	16 50
Lakeview.....	184	99	87	.....	2	50	.....	8	.....	5 76	2 08	7 84
L'Anse.....	76	59	45	.....	1	59	.....	8	.....	.....	7 78	.....
Lansing.....	1,400	888	814	.....	20	44	.....	10	8	9 80	6 78	16 78

TABLE XXIII.—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Lawton	110	87	84	.....	2	44	4	9	.....	.....	\$2 27	.....
Lealie	162	108	100	.....	2	54	.....	9	.....	\$6 00	1 70	\$7 70
Linden	48	.....	85	.....	1	.....	2	.....	.....	.....	.....	.....
Lisbon	58	48	81	.....	1	48	1	.....	.....	14 72	1 60	16 82
Litchfield	55	55	40	.....	1	55	.....	.....	.....	8 40	4 02	12 42
Lowell	161	141	133	.....	8	47	1	7	.....	8 51	8 21	11 72
Ludington	1,008	1,012	942	.....	22	46	2	.....	.....	.....	4 89	.....
Luther	232	129	110	.....	2	63	.....	9	.....	5 81	2 07	7 88
Lyons	69	51	48	.....	1 1-2	84	3	.....	.....	.....	1 84	.....
McBride	74	65	65	.....	1	65	.....	8	.....	4 50	1 81	5 81
Mackinaw City	58	47	85	.....	1	47	4	.....	.....	5 74	81	6 55
Mancelona	110	.....	98	.....	2	.....	2	.....	.....	4 82	1 00	5 82
Manchester	200	164	155	.....	4	41	.....	9	.....	.....	8 95	.....
Manistee	2,029	978	948	.....	28	36	.....	10	.....	.....	8 30	.....
Manistique	280	153	134	.....	4	38	.....	10	.....	.....	4 54	.....
Maple Rapids	54	54	48	.....	1	54	.....	.....	.....	.....	1 71	.....
Marcellus	65	57	50	.....	1	57	2	.....	.....	5 22	1 58	6 80
Marine City	336	214	185	.....	4	58	1	.....	.....	4 82	8 55	7 87
Marlette	94	54	50	.....	1	54	.....	.....	.....	.....	1 88	.....
Marquette	888	610	541	.....	15	40	1	8	6	10 98	5 69	16 67
Marshall	426	339	327	.....	10	34	1	10	6	11 09	6 44	17 53
Marysville	70	36	36	.....	1	36	.....	.....	.....	17 58	2 16	19 74
Mason	302	194	177	.....	5	39	4	.....	.....	.....	4 21	.....
Mattawan	28	26	20	.....	1	26	.....	.....	.....	12 36	1 92	14 28
Mayville	65	60	50	.....	1	60	.....	.....	.....	.....	1 77	.....
Menominee	1,020	674	608	.....	15	45	.....	.....	.....	.....	5 58	.....
Michigamme	256	166	149	.....	8	55	.....	.....	.....	.....	7 44	.....
Middleville	66	66	.....	.....	2	33	3	10	.....	.....	8 41	.....
Milford	145	114	106	.....	3	38	7	10	4	6 81	3 38	9 69
Montague	389	238	212	1	3	59	.....	11	.....	.....	3 74	.....
Monroe City	327	245	221	1-6	4	59	10	10	.....	.....	4 46	.....
Morrice	42	.....	.....	.....	1	.....	.....	.....	.....	.....	7 49	.....
Morley	76	78	52	.....	1	78	1	9	.....	5 50	99	6 49
Mt. Clemens	716	334	330	1-3	7 1-2	45	.....	.....	.....	6 68	2 97	9 65
Mt. Morris	62	60	45	.....	1	60	.....	.....	.....	9 72	1 41	11 13
Mt. Pleasant	483	306	266	.....	6	51	1	11	.....	8 74	4 82	13 56

TABLE XXIII.—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Muir	68	41	88	.....	1	41	.....	7	.....	.....	\$2 68	.....
Muskegon.....	4,486	2,543	2,428	1	70	36	.....	7	6	.....	4 42	.....
Nashville.....	128	120	110	.....	2	60	3	11	10	.....	1 92	.....
National Mine.....	153	115	79	1	1	57	2	8	.....	.....	17 96	.....
Negaunee.....	908	472	448	.....	9	52	.....	10	.....	10 98	6 19	17 17
Newaygo.....	140	118	97	.....	2	59	.....	.....	.....	.....	2 20	.....
New Baltimore.....	48	42	34	.....	1	42	.....	8	8	6 66	5 48	12 14
Newbury.....	166	106	87	.....	2	53	.....	12	.....	.....	7 12	.....
New Haven.....	72	.....	35	.....	1	.....	.....	.....	.....	.....	1 11	.....
New Hudson.....	80	28	25	.....	1	28	.....	.....	.....	14 88	1 84	16 22
New Troy.....	82	.....	49	.....	1	.....	.....	.....	.....	.....	.....	.....
Niles.....	564	417	397	1-3	11	38	4	.....	.....	12 10	5 25	17 35
North Adams.....	57	53	.....	.....	1	53	1	10	.....	8 80	3 84	12 64
North Branch.....	208	168	124	.....	3	84	2	12	.....	3 57	2 23	5 83
Northport.....	59	.....	.....	.....	1	.....	1	.....	.....	3 81	1 07	4 88
Norway.....	251	210	179	.....	4	53	.....	8	2	9 86	6 04	15 90
Okemos.....	59	.....	44	.....	1	.....	.....	.....	.....	.....	1 07	.....
Onondaga	43	31	30	.....	1	31	.....	.....	.....	15 89	1 83	17 22
Ontonagon.....	214	148	114	.....	3	49	.....	.....	.....	.....	6 14	.....
Opechee	300	252	221	.....	6	42	.....	7	.....	.....	1 57	.....
Orion	71	56	50	.....	1 1-3	42	.....	9	6	6 63	1 24	7 87
Ortonville	45	.....	42	.....	1	.....	.....	.....	.....	.....	2 71	.....
Oscoda.....	733	385	329	.....	8	48	8	9	.....	.....	2 59	.....
Oaseo.....	46	46	29	.....	1	46	.....	.....	.....	3 72	80	4 52
Otsego.....	183	113	104	.....	2	56	1	10	5	.....	5 19	.....
Otter Lake.....	58	28	25	.....	1	28	4	.....	.....	7 72	1 52	9 24
Ovid	263	148	141	.....	4	37	.....	10	6	12 04	4 00	16 04
Owosso.....	1,066	748	701	1	16	47	.....	.....	.....	.....	9 38	.....
Palo.....	26	26	20	.....	1	26	.....	.....	.....	.....	1 60	.....
Parma	69	.....	45	.....	1	.....	.....	.....	.....	.....	.....	.....
Paris No. 1.....	48	48	.....	.....	1	48	.....	.....	.....	11 27	1 88	12 65
Paris	49	49	27	.....	1	49	.....	.....	.....	12 81	1 56	14 36
Paw Paw	111	81	77	.....	2	41	.....	10	.....	.....	3 88	.....
Petersburg.....	106	106	65	.....	2	53	.....	9	.....	.....	1 60	.....
Pierson.....	64	64	56	1	64	10 47	1 37	11 84
Pinckney	104	82	78	2	41	11	6	8 31	9 44	17 75

PRIMARY SCHOOL STATISTICS.

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TABLE XXIII.—Continued.

Districts.	Enrollment in department.	Average number belonging.	Average daily attendance.	No. of men teachers.	No. of women teachers.	Average No. of pupils to each teacher.	No. of non-resident pupils.	Av. age of class promoted.		Cost per capita for instruction.	Cost per capita for incidentals.	Total cost per capita.
								Years.	Months.			
Pinnebog	70	.....	45	.....	1	.....	.....	.....	.....	.....	.....	.....
Plainwell	132	118	118	.....	2	59	.....	.....	.....	.....	\$2 30	.....
Plymouth.....	160	140	120	1-16	8	47	.....	10	.....	\$7 90	\$2 14	\$10 04
Pontiac	649	456	441	1-3	10 1-2	42	4	12	2	10 11	4 18	14 24
Port Austin.....	63	56	54	.....	1	56	2	.....	.....	.....	3 81	.....
Port Crescent.....	44	31	31	.....	1	31	8	.....	.....	14 22	2 10	16 32
Port Hope.....	82	78	75	.....	1	78	4	12	.....	11 67	1 81	18 48
Port Huron.....	1,937	1,049	924	.....	22	48	6	11	.....	.....	4 89	.....
Portland.....	242	179	163	.....	4	45	.....	.....	.....	.....	1 27	.....
Port Sanilac.....	32	26	20	.....	1	26	.....	.....	.....	9 62	1 23	10 90
Powers	79	79	41	.....	1	79	.....	.....	.....	12 23	2 73	16 01
Quincy.....	160	103	100	.....	2	53	.....	9	.....	9 43	7 84	17 27
Reading.....	113	100	95	.....	2	50	.....	7	.....	.....	1 96	.....
Reed City.....	306	213	196	1	3	53	2	10	.....	6 80	1 40	8 20
Republic.....	363	308	250	1-4	5	62	.....	7	.....	.....	17 20	.....
Richmond	122	94	.....	.....	2	47	7	8	.....	5 07	2 39	7 46
Rochester.....	97	81	65	.....	1	81	.....	9	.....	3 95	4 50	8 45
Rockland.....	53	53	30	.....	1	53	.....	.....	.....	.....	5 42	.....
Rogers City.....	61	.....	34	.....	1	.....	.....	.....	.....	.....	.....	.....
Romeo	332	196	186	.....	3	66	.....	9	7	.....	4 25	.....
Saginaw City.....	2,333	1,521	1,420	5	34	36	14	.....	.....	7 72	6 12	13 84
St. Charles.....	163	99	83	.....	2	50	.....	9	.....	7 07	1 55	8 62
St. Clair	330	235	260	.....	7	41	.....	10	.....	3 41	4 79	13 20
St. Johns.....	558	341	315	1-4	7	49	5	11	4	3 76	3 40	12 16
St. Louis.....	561	203	227	.....	6	34	.....	.....	.....	.....	7 60	.....
Salem	51	30	31	.....	1	30	.....	.....	.....	5 13	1 91	7 04
Saline.....	139	104	100	.....	2	52	2	9	.....	6 29	3 22	9 51
Sand Beach.....	169	.....	.....	.....	2	.....	.....	.....	.....	.....	3 22	.....
Saranac.....	126	86	83	.....	2	43	.....	.....	.....	.....	2 65	.....
Saugatuck	177	100	93	.....	2	50	2	.....	.....	.....	2 73	.....
Sault Ste. Marie....	953	455	400	.....	10	45	4	10	.....	.....	14 26	.....
Schoolcraft.....	53	46	43	.....	2	23	.....	.....	.....	.....	3 52	.....
Shaftsbury	43	43	40	.....	1	43	2	.....	.....	14 87	95	15 82
Shelby	121	66	.....	.....	1	66	.....	.....	.....	.....	1 93	.....
South Haven.....	277	253	175	.....	4	63	3	10	.....	3 88	1 69	5 57
Sparta	60	60	50	.....	1	60	.....	.....	.....	.....	1 47	.....

SUPERINTENDENT'S REPORT.

TABLE XXIII.—Continued.

[illegible]

TABLE XXIV.
Receipts and Expenditures at Teachers' Institutes for the Calendar Year 1889.

Counties.	Location.	Date.	Receipts.		Disbursements.			
			County fund.	State fund	Compensation of instructors.	Expenses of instructors.	Other expenses.	Total.
Totals.....	.....	.....	\$9,478 76	\$1,917 47	\$7,518 49	\$2,764 18	\$1,123 56	\$11,898 23
Alcona.....	Harrisville.....	March 25-29.....	\$68 00	\$38 85	\$65 00	\$21 35	\$15 00	\$101 35
Allegan.....	Douglass.....	April 1-5.....	185 90	.....	90 00	26 10	19 80	185 90
Allegan.....	Allegan.....	Oct. 28-Nov. 1.....	133 45	.....	90 00	19 95	23 50	133 45
Alpena.....	Alpena.....	Aug. 28-30.....	46 50	60 00	61 00	45 50	.....	106 50
Antrim.....	Bellaire.....	Aug. 19-23.....	55 00	60 00	80 00	21 50	13 50	115 00
Arenac.....	Standish.....	March 25-29.....	37 00	54 25	65 00	9 05	17 20	91 25
•Barry.....	Hastings.....	Aug. 5-16.....	276 75	.....	167 57	84 18	25 00	276 75
Bay.....	West Bay City.....	April 1-5.....	109 10	.....	70 00	22 60	16 50	109 10
Benzle.....	Benzonia.....	Aug. 12-17.....	40 00	60 00	56 88	34 25	8 87	100 00
•Berrien.....	St. Joseph.....	Aug. 12-23.....	298 65	.....	195 00	87 75	15 90	298 65
•Branch.....	Coldwater.....	July 22-Aug. 2.....	286 65	.....	185 00	42 95	36 70	286 65
Calhoun.....	Athens.....	March 25-29.....	156 50	.....	90 00	54 75	11 75	156 50
Cass.....	Cassopolis.....	Aug. 19-23.....	130 00	.....	90 00	21 75	18 25	180 00
Charlevoix.....	Boyne City.....	Aug. 12-16.....	85 00	45 00	80 00	26 65	11 35	130 00
Cheboygan.....	Cheboygan.....	Aug. 28-30.....	55 00	60 00	81 00	21 20	12 80	115 00
Chippewa.....	Sault Ste. Marie.....	Aug. 28-30.....	67 50	60 00	53 43	65 30	8 77	127 50
Clare.....	Harrison.....	April 1-5.....	61 50	84 10	80 00	15 60	.....	95 60
•Clinton.....	St. Johns.....	Aug. 12-30.....	196 41	.....	142 45	27 50	26 46	196 41

• Institute continued two weeks.

b Institute continued three weeks.

TABLE XXIV.—Continued.

Counties.	Location.	Date.	Receipts.		Disbursements.			
			County fund.	State fund.	Compensation of instructors.	Expenses of instructors.	Other expenses.	Total.
Delta.....	Escanaba.....	Aug. 19-23.....	941 50	900 00	\$77 20	\$14 65	\$9 65	\$101 50
Eaton.....	Charlotte.....	Aug. 19-23.....	142 60	.....	100 00	23 60	19 00	145 60
Emmet.....	Harbor Springs.....	Aug. 19-23.....	59 50	60 00	86 40	19 75	13 35	119 50
Genesee.....	Flint.....	Aug. 5-23.....	327 60	.....	220 00	82 60	25 00	327 60
Gladwin.....	Gladwin.....	July 15-19.....	18 50	60 00	45 40	31 10	2 00	78 50
Grand Traverse.....	Traverse City.....	Aug. 26-30.....	57 50	60 00	75 10	33 15	9 25	117 50
Gratiot.....	Ithaca.....	Aug. 26-30.....	139 79	.....	90 00	29 89	19 90	139 79
Hilledale.....	Hilledale.....	Aug. 12-16.....	157 00	.....	110 00	32 00	15 00	157 00
Houghton.....	Calumet.....	Aug. 19-23.....	114 35	60 00	90 00	63 35	21 00	174 35
Huron.....	Bad Axe.....	May 20-24.....	106 96	34 29	90 00	24 00	19 25	143 25
Ingham.....	Mason.....	Aug. 26-30.....	136 80	.....	95 00	24 00	17 80	136 80
Ionia.....	Ionia.....	Aug. 5-23.....	287 07	.....	210 00	61 33	15 75	287 07
Isabella.....	Mt. Pleasant.....	Aug. 26-30.....	101 00	38 60	90 00	33 00	16 60	139 60
Jackson.....	Parma.....	March 25-29.....	143 00	.....	90 00	22 45	30 55	143 00
Kalamazoo.....	Kalamazoo.....	Aug. 5-9.....	206 13	.....	110 00	81 13	15 00	206 13
Kalkaska.....	Kalkaska.....	Aug. 26-30.....	67 50	60 00	80 00	35 10	12 40	127 50
Kent.....	Cedar Springs.....	April 1-5.....	133 70	.....	80 00	35 70	18 00	133 70
Kent.....	Grand Rapids.....	Aug. 26-30.....	403 95	.....	245 00	147 45	11 50	403 95
Keweenaw.....	Eagle River.....	March 21-23.....	47 00	40 00	60 00	15 00	12 00	87 00
Lake.....	Baldwin.....	April 1-5.....	81 00	31 55	80 00	18 45	14 10	112 55
Lapeer.....	Imlay City.....	Aug. 12-25.....	326 50	.....	236 00	61 16	30 34	326 50
Leelanaw.....	Maple City.....	Aug. 5-20.....	100 00	60 00	140 00	13 75	6 25	160 00

RECEIPTS AND EXPENDITURES AT INSTITUTES.

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Leavenworth	Aug. 19-22	175 70	110 00	56 70	10 00	175 70
Livingsstone	Aug. 12-23	263 67	215 00	60 75	68 68	263 67
Mackinac	Aug. 19-23	26 20	97 67	20 00	6 68	66 60
Macomb	Aug. 12-16	124 20	90 00	24 20	10 00	124 20
Manistee	March 25-30	63 00	90 00	28 00	10 00	122 00
Marquette	Aug. 26-30	66 00	80 00	48 00	15 00	149 00
Maxxata	Aug. 19-23	122 00	110 00	7 00	16 00	126 00
Menominee	Aug. 26-30	145 00	90 00	66 96	13 26	163 21
Midland	July 22-25	66 50	78 06	26 65	10 96	115 50
Miswaukee	Aug. 26-30	16 00	56 00	20 00	-----	76 00
Monroe	Aug. 12-16	126 45	90 00	24 10	14 26	126 45
Montcalm	Aug. 19-20	220 78	163 23	63 45	16 10	250 78
Montmorency	May 20-24	62 50	60 00	24 20	11 20	108 40
Muskegon	April 1-5	26 00	100 00	14 50	17 96	123 45
Newaygo	Aug. 19-23	77 50	90 00	28 00	14 50	127 50
Oakland	Aug. 19-20	261 63	196 00	54 86	21 75	261 63
Oceana	Aug. 12-16	97 00	90 00	27 26	18 63	146 93
Ogemaw	Jan. 21-23	20 00	70 00	12 20	12 00	94 20
Ontonagon	Aug. 26-30	49 00	56 63	43 86	6 55	109 00
Oscoda	Aug. 26-30	96 00	80 00	26 00	13 50	131 50
Ozago	May 12-17	12 80	50 00	10 50	12 00	73 50
Ottawa	April 1-5	143 24	100 00	26 49	15 44	143 24
Presque Isle	Feb. 12-23	65 50	80 00	21 50	12 05	112 55
Roscommon	May 6-10	10 00	59 60	19 04	9 50	81 04
Crawford	-----	26 00	45 04	-----	-----	-----
Saginaw	Aug. 19-23	226 00	130 00	70 50	24 60	226 00

a Institute continued two weeks.
b Institute continued three weeks.
c Institute continued four weeks.

TABLE XXIV.—Continued.

Counties.	Location.	Date.	Receipts.		Disbursements.		
			County fund.	State fund.	Compensation of instructors.	Other expenses.	Total.
St. Joseph.....	Constantine.....	Aug. 20-30.....	\$128 70	.....	\$90 00	\$15 25	\$128 70
Sanilac.....	Downington.....	March 26-29.....	158 00	.....	90 00	17 75	158 00
Shiawassee.....	Owosso.....	July 20-Aug. 28.....	309 13	.....	805 00	17 53	309 13
Tuscola.....	Caro.....	Aug. 19-23.....	149 95	.....	90 00	19 60	149 95
Washtenaw.....	Ypsilanti.....	Aug. 12-16.....	175 00	.....	130 00	21 75	175 00
Wayne.....	Detroit.....	Aug. 12-16.....	192 85	.....	110 00	16 00	192 85
Wexford.....	Manton.....	April 1-5.....	68 60	\$90 00	90 00	10 00	128 60

a institute continued two weeks.

TABLE XXV.

Local Committees, Conductors and Instructors at Teachers' Institutes for the Calendar Year 1889.

Counties.	Local Committees.	Conductors.	Assistant Instructors.
Alcona.....	L. Frederick.....	O. D. Thompson...	J. E. Fair, J. H. Marsh.
Allegan ¹	James Warnock.....	J. G. Plowman	P. A. Latta.
Allegan ²	H. A. Simonds	H. R. Pattengill...	P. A. Latta.
Alpena	F. S. Dewey.....	Chas. McKenney..	J. E. Kinnane.
Antrim	C. S. Guile.....	Hamilton King....	W. M. Andrus.
Arenac.....	Cora J. Bradley.....	H. C. Rankin.....	A. L. Wilkins.
Barry	H. B. Andrus.....	W. H. Cheever....	{ Geo. N. Ellis, C. T. Grawn, Elnora Cuddeback.
Bay	J. E. Lemon.....	D. Howell.....	J. E. Kinnane.
Benzie	T. B. Pettitt.....	Albert Jennings...	Stuart Mackibbin.
Berrien	J. J. Brunson.....	E. L. Briggs	{ G. A. Osinga, Elnora Cuddeback, J. J. Brunson.
Branch.....	B. S. Spofford	G. J. Edgecombe..	W. D. Olisbe, B. S. Spofford.
Calhoun	E. E. Overholt.....	J. W. Simmons....	R. A. Culver.
Cass.....	Mrs. D. B. Ferris.....	H. R. Pattengill...	J. R. Miller.
Charlevoix.....	R. L. Corbett.....	Hamilton King....	W. M. Andrus.
Cheboygan.....	G. S. Moore.....	H. C. Rankin.....	M. O. Graves.
Chippewa	S. P. Tracy	Hamilton King....	Mary F. Lockwood.
Clare	T. W. Averill.....	W. N. Ferris.....	P. D. Cornell.
Clinton	R. M. Winston	C. F. R. Bellows...	E. M. Plunkett.
Delta	Kirk Spoor.....	W. N. Ferris.....	Kirk Spoor.
Eaton	Orr Schurtz	F. A. Barbour.....	Geo. N. Ellis, Orr Schurtz.
Emmet.....	E. F. Waldo.....	H. C. Rankin.....	Stuart Mackibbin.
Genesee.....	E. D. Black.....	O. E. Aleshire.....	{ W. H. Cheever, W. H. Hewitt, Maud Aldrich, G. C. Kimball, M. Wilson.
Gladwin.....	Isaac Foster.....	Orr Schurtz	Chas. McKenney.
Grand Traverse..	C. J. Kneeland.....	J. W. Ewing.....	Jerome Travis.
Gratiot.....	J. N. McCall.....	G. A. Parker	H. R. Gass.
Hillsdale.....	Paul Rideout.....	F. A. Barbour.....	M. Louise Jones.
Houghton.....	E. D. Burgess.....	H. M. Enos.....	Miss Ella Ludwig.
Huron.....	C. E. Clark	H. R. Pattengill...	C. L. Bemis.
Ingham	R. H. Gully.....	H. R. Pattengill...	M. Louise Jones, Nettle Hines.
Ionia.....	A. L. Silvernail.....	O. D. Thompson...	C. L. Bemis, Mary Cadwell.
Iscoco	A. L. Le Duc	C. L. Bemis.....	C. K. Perrine.
Isabella.....	T. Knox Jeffreys.....	H. K. Warren.....	S. W. Baker.
Jackson.....	J. W. Kennedy.....	B. A. Hinsdale	D. E. Haskins.
Kalamazoo.....	Mary French.....	E. C. Thompson...	S. T. Morris, Ashley Olapp.
Kalkaska.....	Geo. R. Catton	Austin George.....	H. W. McIntosh.

TABLE XXV.—Continued.

Counties.	Local Committees.	Conductors.	Assistant Instructor.
Kent ¹	Nora Clark	Hamilton King....	E. A. Carpenter.
Kent ²	F. M. Kendall	F. M. Kendall	{ Miss M. S. Cooper, E. E. White, Alex. E. Frye.
Keweenaw	L. H. Darling	W. J. Cox	L. S. Overholt.
Lake	A. L. Marvin	C. M. McLean	F. J. West.
Lapeer	N. Le Gear	E. A. Strong	{ Geo. A. Parker, M. Louise Jones, Edwin Debar.
Leelanaw	A. E. Densmore	A. E. Densmore	Henry McManus, O. A. Savage.
Lenawee	E. A. Wilson	John Goodison	W. C. Hull, H. K. Warren.
Livingston	H. O. Reed	E. C. Thompson	{ Mary F. Lockwood, I. T. O'Keefe, Jas. Chalmers.
Mackinac	J. R. Bailey	Delos Fall	F. O. Wickham.
Macomb	Miss O. A. Ladd	John Goodison	C. B. Hall.
Manistee	Mrs. Ella Hopkins	Albert Jennings	S. W. Baker.
Marquette	Anna M. Chandler	Delos Fall	Nina C. Vanderwalker.
Mecosta	S. W. Baker	E. P. Church	P. M. Brown, S. W. Baker.
Menominee	Jesse Hubbard	W. N. Ferris	Miss Ella Ludwig.
Midland	L. L. Jenny	H. R. Gass	J. B. Estabrook.
Missaukee	Mrs. Geo. Roche	C. M. McLean	E. Wood.
Monroe	L. B. Smith	I. N. Demmon	Ferris S. Fitch.
Montcalm	G. B. Benedict	J. B. Estabrook	N. H. Hayden, Mrs. D. E. Wood.
Montmorency	James Francis	H. A. Ford	{ F. S. Dewey, John Stevens, Edward Magee.
Muskegon	J. B. Estabrook	E. L. Briggs	J. B. Estabrook.
Newaygo	Mrs. D. C. Brooks	W. O. Ginn	N. H. Walbridge.
Oakland	A. P. Cook	R. W. Putnam	{ S. A. Putnam, S. G. Burkhead, Fanny Gray.
Oceana	Chas. N. Sowers	H. C. Rankin	J. O. Reed.
Ogemaw	B. Bennett	H. R. Pattengill	A. E. Sharpè.
Ontonagon	N. W. Haire	H. M. Enos	J. G. Johnston.
Osceola	N. H. Walbridge	J. N. McCall	F. R. Hathaway.
Otsego	Miss F. M. Towle	W. O. Ginn	
Ottawa	O. O. Lillie	Delos Fall	J. W. Humphrey.
Presque Isle	E. Erskine, Jr.	E. L. Little	W. E. Rice.
Roscommon	Mary E. Mills	W. O. Ginn	Mary E. Mills, Ella Brown.
Saginaw	O. Waltz	Austin George	M. O. Graves, J. P. Reed.
St. Clair	Geo. A. Parker	Geo. A. Parker	{ O. D. Thompson, Nina C. Vander- walker.
St. Joseph	H. E. Wilson	H. A. Ford	G. J. Edgecombe.
Sanilac	G. E. English	R. W. Putnam	J. Montgomery.
Shiawassee	J. N. McBride	J. W. Simmons	{ A. J. Swain, W. J. McKone, E. L. Griffeth.
Tuscola	E. J. Darbee	I. N. Demmon	S. T. Morris.
Van Buren	E. M. Russell	H. R. Pattengill	W. W. Chalmers, E. M. Russell.
Washtenaw	E. C. Warner	D. Putnam	W. C. Ginn, Mary Lockwood.
Wayne	M. H. Winters	R. W. Putnam	J. A. Sinclair, Mrs. D. E. Wood.
Wexford	O. M. McLaughlin	O. T. Grawn	Wm. H. Brooks.

TABLE XXVI.

Enrollment at Teachers' Institutes for the Calendar Year 1889.

Counties.	Number of teachers required to supply the schools.	Number Enrolled.			Kinds and Grades of Certificates Held by Members.						No. without expe- rience in teach- ing.	No. having recd. normal instruc- tion.	Average attend- ance each half day.
		Men.	Women.	Total.	State.	Normal.	First.	Second.	Third.	Special.			
Totals.....	9,987	1,587	5,010	6,597	28	95	242	489	8,984	36	1,746	555	.....
Alcona.....	27	8	25	33	.....	.....	4	1	18	.....	10	.....	29.6
Allegan.....	224	27	64	91	.....	1	1	5	44	.....	46	8	62.5
".....	.....	35	91	126	.....	2	6	17	70	.....	40	8	95.4
Alpena.....	67	1	50	51	.....	.....	2	1	26	.....	21	.....	39.7
Antrim.....	86	16	44	60	.....	.....	1	3	36	.....	20	.....	50.
Arenac.....	83	19	40	59	.....	1	2	4	24	.....	24	4	52.
Barry.....	160	25	82	110	.....	8	7	14	85	1	13	5	60.4
Bay.....	191	18	62	80	.....	1	3	9	49	.....	18	1	62.
Benzie.....	52	12	44	56	.....	8	4	5	28	.....	24	3	37.8
Berrien.....	231	44	122	166	2	8	14	18	109	.....	25	17	70.
Branch.....	164	17	93	110	1	1	8	10	72	2	23	9	83.
Calhoun.....	256	38	125	163	.....	.....	7	13	110	.....	43	15	133.3
Cass.....	140	19	48	67	.....	2	5	8	47	.....	20	11	38.2
Charlevoix.....	80	17	53	70	.....	.....	4	1	45	.....	24	5	43.
Cheboygan.....	63	11	81	42	.....	1	5	6	22	1	7	2	81.
Chippewa.....	51	14	33	47	.....	1	1	4	32	1	8	3	39.
Clare.....	54	3	17	20	.....	.....	2	.....	11	.....	8	2	16.3
Clinton.....	163	35	100	135	.....	1	1	9	86	2	42	11	80.
Delta.....	54	2	27	29	.....	.....	.....	3	20	.....	13	1	20.3
Eaton.....	198	55	153	208	1	1	1	11	185	1	69	11	139.
Emmet.....	74	8	42	50	.....	1	2	2	38	1	6	4	36.
Genesee.....	217	25	107	132	.....	.....	6	11	89	.....	25	9	67.
Gladwin.....	24	4	17	21	.....	.....	2	1	12	.....	6	.....	14.
Grand Traverse.....	85	9	45	54	1	21	.....	4	44	1	3	5	36.
Gratiot.....	164	45	99	144	.....	1	7	6	112	.....	36	6	104.
Hilledale.....	205	40	182	172	.....	.....	4	10	123	4	43	16	96.
Houghton.....	137	5	63	68	2	2	1	7	44	2	10	8	39.6
Huron.....	128	33	92	120	4	.....	4	15	73	.....	32	15	115.
Isgham.....	203	24	82	106	.....	1	4	9	75	.....	25	3	66.3

TABLE XXVI.—Continued.

Counties.	Number of teachers required to supply the schools.	Number Enrolled.			Kinds and Grades of Certificates Held by Members.						No. without expe- rience in teach- ing.	No. having receiv- ed normal instruc- tion.	Average attend- ance each half day.
		Men.	Women.	Total.	State.	Normal.	First.	Second.	Third.	Special.			
Ionia.....	300	29	115	144	.....	.....	2	7	110	.....	33	4	110.9
Isabella.....	112	18	57	75	.....	1	4	5	58	.....	14	9	54.
Jackson.....	246	74	157	231	1	8	5	14	104	.....	107	19	135.1
Kalamazoo.....	221	80	153	193	2	1	2	9	114	1	45	15	145.6
Kalkaska.....	57	14	29	43	.....	.....	4	5	25	.....	12	1	33.5
Kent.....	484	16	237	303	.....	.....	.....	.....	.....	.....	.....	37	.....
Kent.....	.....	80	140	170	1	2	5	10	89	8	55	5	122.
Keweenaw.....	13	11	21	32	.....	1	.....	1	11	.....	20	3	26.
Lake.....	60	11	27	38	.....	.....	.....	3	22	.....	17	3	23.
Lapeer.....	183	29	78	107	.....	5	3	7	76	.....	16	15	56.
Leelanaw.....	56	19	43	67	.....	.....	.....	3	36	1	27	3	37.
Lenawee.....	230	20	101	121	.....	2	3	8	94	.....	23	10	77.2
Livingston.....	160	33	107	145	4	1	3	6	99	1	43	23	68.
Mackinac.....	42	6	17	23	.....	.....	2	2	14	.....	5	2	14.7
Macomb.....	152	18	59	77	.....	2	1	2	63	.....	15	8	53.
Manistee.....	99	18	46	59	.....	2	2	.....	39	.....	15	5	54.1
Marquette.....	121	8	76	84	.....	5	3	11	50	1	14	13	63.3
Mecosta.....	120	24	76	100	.....	.....	.....	14	55	1	29	3	69.3
Menominee.....	97	7	43	55	.....	2	5	2	30	.....	17	10	39.2
Midland.....	72	10	59	69	.....	1	.....	2	34	2	25	6	65.
Missaukee.....	46	11	15	26	.....	.....	.....	5	14	.....	7	4	18.
Monroe.....	159	65	22	87	.....	.....	2	6	62	.....	23	11	53.2
Montcalm.....	133	22	57	79	.....	1	7	6	51	.....	22	9	40.
Montmorency.....	27	4	16	20	.....	.....	3	1	6	.....	.....	1	14.3
Muskegon.....	193	23	65	88	.....	.....	4	10	49	.....	31	5	53.
Newaygo.....	124	3	53	56	.....	.....	1	3	45	1	6	10	35.3
Oakland.....	276	23	97	125	2	2	2	3	94	.....	32	23	72.
Oceana.....	99	23	51	74	.....	.....	4	6	57	.....	10	4	60.
Ogemaw.....	45	12	27	39	.....	.....	3	2	19	1	17	2	30.2
Ontonagon.....	26	4	23	27	.....	2	3	1	16	.....	8	3	24.
Osceola.....	110	13	31	44	.....	1	1	4	23	1	9	3	23.
Otsego.....	42	14	29	43	.....	.....	4	1	29	.....	8	2	37.5
Ottawa.....	135	36	129	165	.....	.....	6	11	87	.....	76	7	65.3
Presque Isle.....	35	27	12	39	.....	.....	.....	3	10	5	21	4	25.6
Roscommon and Crawford.....	66	10	34	44	.....	.....	1	7	26	2	12	4	33.7

TABLE XXVI.—Continued.

Counties.	Number of teachers required to supply the schools.	Number Enrolled.			Kinds and Grades of Certificates held by Members.						No. without expe- rience in teach- ing.	No. having receiv- ed normal instruc- tion.	Average attend- ance, each, half day.
		Men.	Women.	Total.	State.	Normal.	First.	Second.	Third.	Special.			
Saginaw	321	85	138	173	.....	1	11	11	130	.....	34	8	121.5
St. Joseph	170	42	78	120	3	5	8	5	79	.....	32	17	66.
Sanilac	155	52	70	122	2	.....	5	26	63	.....	31	.....	99.
Shiawassee	168	28	119	147	.....	.....	7	6	99	.....	48	7	78.
Tuscola	176	34	76	110	.....	1	4	11	65	.....	38	5	80.
Washtenaw	266	14	58	72	.....	5	2	.....	57	.....	15	25	52.4
Wayne	663	24	93	117	1	2	20	3	72	.....	22	20	71.4
Wexford	87	21	30	51	1	.....	2	1	25	.....	23	5	39.8

TABLE XXVII.

List of County Examiners for 1889-90.

Counties.	Names.	Postoffices.	Occupations.	Terms Expire.
Alcona.....	Ezra Goheen, Chairman.....	Alcona.....	Teacher.....	1890
	Lorenzo Frederick, Secretary.....	Harrisville.....	Teacher.....	1890
	P. C. Goldie.....	Harrisville.....	Clergyman.....	1891
Alger.....	Mrs. F. D. Johnston, Chairman.....	Rock River.....	Housekeeper.....	1890
	Mrs. Mary E. Oliver, Secretary.....	Rock River.....	Housekeeper.....	1890
	Jane Ballard.....	Onota.....	Housekeeper.....	1891
Allegan.....	G. A. Osinga, Chairman.....	Otsego.....	Teacher.....	1890
	P. A. Latta, Secretary.....	Allegan.....	Attorney.....	1890
	J. F. Taylor.....	Douglas.....	Clergyman.....	1891
Alpena.....	James A. Case, Chairman.....	Alpena.....	Farmer.....	1890
	F. S. Dewey, Secretary.....	Alpena.....	Merchant.....	1890
	J. Cavanaugh.....	Alpena.....	Justice of the Peace.....	1891
Antrim.....	W. R. Grant, Chairman.....	Mancelona.....	Clergyman.....	1890
	Walter M. Andrus, Secretary.....	Elk Rapids.....	Teacher.....	1890
	F. E. Severance.....	East Jordan.....	Farmer.....	1891
Arenac.....	Marion F. Parker, Chairman.....	Deep River.....	Teacher.....	1890
	E. G. Cole, Secretary.....	Au Gres.....	Merchant.....	1890
	A. L. Wilkins.....	Maple Ridge.....	Farmer.....	1891
Baraga.....	J. J. Byers, Chairman.....	Baraga.....	.....	1890
	Wm. L. Mason, Secretary.....	L'Anse.....	Teacher.....	1890
	M. E. Williams.....	Michigamme.....	Miner.....	1891
Barry.....	J. W. Roberts, Chairman.....	Hastings.....	Teacher.....	1890
	Enoch Andrus, Secretary.....	Hastings.....	Farmer.....	1890
	J. M. Smith.....	Woodland.....	Teacher.....	1891
Bay.....	T. S. Joalin, Chairman.....	Pinconning.....	Engineer.....	1890
	Jno. E. Kinnane, Secretary.....	Bay City.....	Student.....	1890
	M. R. Hartwell.....	West Bay City.....	Teacher.....	1891
Benzie.....	D. F. Holden, Chairman.....	Oviatt.....	Farmer.....	1890
	Mrs. Rose Woodward, Secretary.....	Frankfort.....	Housekeeper.....	1890
	LeRoy Morgan.....	Empire.....	Farmer.....	1891
Berrien.....	John C. Lawrence, Chairman.....	Benton Harbor.....	Farmer.....	1890
	Miss Rachel Tate, Secretary.....	Berrien Springs.....	Teacher.....	1890
	Henry Crosby.....	New Buffalo.....	Teacher.....	1891
Branch.....	W. H. Lockerby, Chairman.....	Quincy.....	Attorney.....	1890
	B. S. Spafford, Secretary.....	Coldwater.....	Teacher.....	1890
	C. C. Johnson.....	Coldwater.....	Attorney.....	1891
Calhoun.....	Miss Lizzie M. Cook, Chairman.....	Homer.....	Teacher.....	1890
	R. A. Culver, Secretary.....	Tekonsha.....	Teacher.....	1890
	S. G. Gorsline.....	Battle Creek.....	Farmer.....	1891
Cass.....	W. W. Chalmers, Chairman.....	Cassopolis.....	Teacher.....	1890
	G. W. Gard, Secretary.....	Volinia.....	Farmer.....	1890
	Edmond Shoetzow.....	Volinia.....	Teacher.....	1891
Charlevoix.....	Wm. Harris, Chairman.....	Norwood.....	Farmer.....	1890
	R. L. Corbet, Secretary.....	Boyne City.....	Attorney.....	1890
	J. M. Harris.....	Boyne City.....	Teacher.....	1891
Cheboygan.....	D. J. Galbraith, Chairman.....	Cheboygan.....	Teacher.....	1890
	G. S. Moore, Secretary.....	Cheboygan.....	Teacher.....	1890
	W. C. Thompson.....	Cheboygan.....	Teacher.....	1891
Chippewa.....	Rodney Graham, Chairman.....	Rosedale.....	Teacher.....	1890
	S. P. Tracy, Secretary.....	Sault Ste. Marie.....	Physician.....	1890
	A. J. Murray.....	Sault Ste. Marie.....	Teacher.....	1891
Clare.....	T. W. Averill, Chairman.....	Harrison.....	County Treasurer.....	1890
	Geo. Cummins, Secretary.....	Harrison.....	Attorney.....	1890
	A. J. Doherty.....	Clare.....	Merchant.....	1891

COUNTY SCHOOL EXAMINERS.

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TABLE XXVII.—Continued.

Counties.	Names.	Postoffices.	Occupations.	Terms Expire.
Clinton.....	J. B. Stone, Chairman.....	Riley.....	Teacher.....	1890
	R. M. Winston, Secretary.....	St. Johns.....	Teacher.....	1890
	E. M. Plunkett.....	Ovid.....	Teacher.....	1891
Crawford.....	E. G. Paine, Chairman.....	Roscommon.....	Teacher.....	1890
	C. E. Hicks, Secretary.....	Frederic.....	Teacher.....	1890
	Mrs. Isabella Cobb.....	Frederic.....	Teacher.....	1891
Delta.....	M. J. Sullivan, Chairman.....	Garden.....	Merchant.....	1890
	John Power, Secretary.....	Escanaba.....	Attorney.....	1890
	Kirk Spoor.....	Escanaba.....	Teacher.....	1891
Eaton.....	J. L. Wagner, Chairman.....	Grand Ledge.....	Teacher.....	1890
	Orr Schurtz, Secretary.....	Charlotte.....	Teacher.....	1890
	Chas. McKinney.....	Olivet.....	Teacher.....	1891
Emmet.....	E. A. Botsford, Chairman.....	Petoskey.....	Teacher.....	1890
	N. H. Crandall, Secretary.....	Levering.....	Teacher.....	1890
	Merrill C. Crandall.....	Levering.....	Merchant.....	1890
Genesee.....	A. E. Ransom, Chairman.....	Flushing.....	Publisher.....	1890
	E. D. Black, Secretary.....	Flint.....	Attorney.....	1890
	Wm. Wilson.....	Flint.....	Teacher.....	1891
Gladwin.....	F. C. Smith, Chairman.....	Gladwin.....	Teacher.....	1890
	F. L. Prindle, Secretary.....	Gladwin.....	Attorney.....	1890
	Miss Edith Johnson.....	Gladwin.....	Teacher.....	1891
Gogebio.....	Thos. Waters, Chairman.....	Bessemer.....	Miner.....	1890
	J. S. Monroe, Secretary.....	Bessemer.....	Attorney.....	1890
	J. K. Niven.....	Bessemer.....	Physician.....	1890
Gd. Traverse ..	C. J. Kneeland, Chairman.....	Traverse City.....	Physician.....	1890
	J. L. Gibbs, Secretary.....	Mayfield.....	Manufacturer.....	1890
	C. T. Grawn.....	Traverse City.....	Teacher.....	1891
Gratiot.....	T. J. Hoxie, Chairman.....	Pompeii.....	Farmer.....	1890
	O. G. Tuttle, Secretary.....	Elm Hall.....	Teacher.....	1890
	Fred Fullerton.....	Sumner.....	Teacher.....	1891
Hilledale.....	E. J. Townsend, Chairman.....	Litchfield.....	Teacher.....	1890
	W. A. Drake, Secretary.....	Hilledale.....	Teacher.....	1890
	J. E. Hammond.....	Hilledale.....	Teacher.....	1891
Houghton.....	C. J. White, Chairman.....	Lake Linden.....	Teacher.....	1890
	J. H. Wilson, Secretary.....	Lake Linden.....	Journalist.....	1890
	Wm. Bath.....	Houghton.....	Book-keeper.....	1891
Huron.....	D. E. Spencer, Chairman.....	Grindstone City.....	Teacher.....	1890
	M. Meddaugh, Secretary.....	Sebewaing.....	Teacher.....	1890
	E. Baskins.....	Uby.....	Teacher.....	1891
Ingham.....	J. S. Huston, Chairman.....	Williamston.....	Teacher.....	1890
	T. A. Stephens, Secretary.....	Stockbridge.....	Teacher.....	1890
	C. M. Young.....	Dansville.....	Teacher.....	1891
Ionia.....	E. A. Murphy, Chairman.....	Lyons.....	Teacher.....	1890
	C. L. Bemis, Secretary.....	Ionia.....	Teacher.....	1890
	Frank Converse.....	Saranac.....	Teacher.....	1891
Iosco.....	C. R. Henry, Chairman.....	Au Sable.....	Attorney.....	1890
	S. B. Laird, Secretary.....	East Tawas.....	Teacher.....	1890
	F. E. Stroup.....	Tawas City.....	Teacher.....	1891
Iron.....	W. F. Carpenter, Chairman.....	Stambaugh.....	Physician.....	1890
	G. L. Woodworth, Secretary.....	Stambaugh.....	Surveyor.....	1890
	S. D. Hollister.....	Crystal Falls.....	Miner.....	1891
Isabella.....	James McIntee, Chairman.....	Mt. Pleasant.....	Physician.....	1890
	T. Knox Jeffereys, Secretary.....	Mt. Pleasant.....	Teacher.....	1890
	S. J. Jamison.....	Loomis.....	Teacher.....	1891
Jackson.....	F. M. Harlow, Chairman.....	Springport.....	Teacher.....	1890
	D. E. Haskins, Secretary.....	Concord.....	Teacher.....	1890
	E. N. Palmer.....	Brooklyn.....	Physician.....	1891
Kalamazoo.....	W. E. Conkling, Chairman.....	Galesburg.....	Teacher.....	1890
	Ashley Clapp, Secretary.....	Vicksburg.....	Teacher.....	1890
	L. H. Stewart.....	Kalamazoo.....	Teacher.....	1891

SUPERINTENDENT'S REPORT.

TABLE XXVII.—Continued.

Counties.	Names.	Postoffices.	Occupations.	Terms Expire.
Kalkaska.....	T. D. Brown, Chairman.....	Kalkaska.....	Farmer.....	1890
	J. W. Andrews, Secretary.....	South Boardman..	Teacher.....	1890
	S. E. Nelhardt.....	Kalkaska.....	Physician.....	1891
Kent.....	E. A. Carpenter, Chairman.....	Caledonia.....	Teacher.....	1890
	A. H. Smith, Secretary.....	Grand Rapids.....	Teacher.....	1890
	O. R. Dockery.....	Rockford.....	Teacher.....	1891
Keweenaw.....	John McClurg, Chairman.....	Central Mine.....	.....	1890
	L. H. Darling, Secretary.....	Eagle River.....	Teacher.....	1890
	O. A. Farwell.....	Phoenix.....	.....	1891
Lake.....	Evan Essery, Chairman.....	Luther.....	Teacher.....	1890
	D. A. Cornell, Secretary.....	Reed City.....	Farmer.....	1890
	W. D. Ellis.....	Chase.....	Teacher.....	1891
Lapeer.....	Edwin Debar, Chairman.....	Almont.....	Teacher.....	1890
	C. E. Palmerlee, Secretary.....	Lapeer.....	Teacher.....	1890
	G. H. Broesamle.....	Imlay City.....	Teacher.....	1891
Leelanaw.....	Henry McManus, Chairman.....	Traverse City.....	Teacher.....	1890
	A. E. Densmore, Secretary.....	Maple City.....	Teacher.....	1890
	W. H. Crowell.....	Maple City.....	Farmer.....	1891
Lenawee.....	H. C. Daniels, Chairman.....	Onsted.....	Teacher.....	1890
	E. G. Walker, Secretary.....	Adrian.....	Teacher.....	1890
	Ira Waterman.....	Hudson.....	Teacher.....	1891
Livingston.....	Stephen Burfie, Chairman.....	Fowlerville.....	Teacher.....	1890
	S. D. Williams, Secretary.....	Fowlerville.....	Attorney.....	1890
	Jas. B. Tozziman.....	Oak Grove.....	.....	1891
Luce.....	Ambro Bettes, Chairman.....	Newberry.....	County Clerk.....	1890
	O. A. Dean, Secretary.....	Newberry.....	Teacher.....	1890
	J. P. Mills.....	McMillan.....	Clergyman.....	1891
Mackinac.....	Jno. R. Bailey, Chairman.....	St. Ignace.....	Physician.....	1890
	C. Y. Bennett, Secretary.....	St. Ignace.....	Attorney.....	1890
	Louis Paley.....	St. Ignace.....	Druggist.....	1891
Macomb.....	David Hammell, Chairman.....	New Baltimore.....	Physician.....	1890
	S. B. Russell, Secretary.....	Mt. Clemens.....	Journalist.....	1890
	John A. Welts.....	Utica.....	Teacher.....	1891
Manistee.....	Geo. H. Kilborn, Chairman.....	Bear Lake.....	Farmer.....	1890
	Miss Lois E. Hall, Secretary.....	Manistee.....	Teacher.....	1890
	Albert Walkly.....	Manistee.....	Attorney.....	1891
Manitou.....	John Dunlevy, Chairman.....	St. James.....	Shoemaker.....	1890
	Owen O'Donnell, Secretary.....	St. James.....	Grocer.....	1890
	W. J. Gallagher.....	St. James.....	Fisherman.....	1891
Marquette.....	F. D. Davis, Chairman.....	Negaunee.....	Teacher.....	1890
	John Northmore, Secretary.....	Republic.....	Teacher.....	1890
	Harlow Olcott.....	Ishpeming.....	Teacher.....	1891
Mason.....	L. W. Rose, Chairman.....	Ludington.....	Farmer.....	1890
	B. S. Mills, Secretary.....	Fountain.....	Farmer.....	1890
	H. D. Robinson.....	Freesoil.....	.....	1891
Mecosta.....	E. E. Wilson, Chairman.....	Stanwood.....	Druggist.....	1890
	P. M. Brown, Secretary.....	Big Rapids.....	Farmer.....	1890
	J. F. Bark.....	Sherman City.....	Teacher.....	1891
Menominee.....	Jessie Hubbard, Chairman.....	Menominee.....	Teacher.....	1890
	J. W. Bird, Secretary.....	Menominee.....	Merchant.....	1890
	S. B. Toby.....	Norway.....	Teacher.....	1891
Midland.....	F. A. Towley, Chairman.....	Midland.....	Physician.....	1890
	W. W. Allen, Secretary.....	Midland.....	Teacher.....	1890
	C. L. Jenny.....	Midland.....	Surveyor.....	1891
Missaukee.....	Wm. Bartholomew, Chairman.....	Pioneer.....	Farmer.....	1890
	Abraham Stout, Secretary.....	Lake City.....	Abstracts.....	1890
	L. P. Lamb.....	Lake City.....	Teacher.....	1891
Monroe.....	J. W. Billmire, Chairman.....	Monroe.....	County Clerk.....	1890
	T. E. Allen, Secretary.....	Carleton.....	Teacher.....	1890
	J. R. Rogers.....	Temperance.....	Teacher.....	1891

COUNTY SCHOOL EXAMINERS.

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TABLE XXVII.—Continued.

Counties.	Names.	Postoffices.	Occupations.	Terms Expire.
Montcalm	J. E. McClarky, Chairman.....	Sheridan.....	Teacher.....	1890
	E. J. Quackenbush, Secretary.....	Stanton.....	Teacher.....	1890
	F. C. Snyder.....	Greenville.....	Farmer.....	1891
Montmorency	Jas. Francis, Chairman.....	Hillman.....	Teacher.....	1890
	Tillison Babcock, Secretary.....	Godfrey.....	Teacher.....	1890
	Wm. Briley.....	Hetherton.....	Teacher.....	1891
Muskegon.....	C. M. McLean, Chairman.....	Whitehall.....	Teacher.....	1890
	H. A. Lewis, Secretary.....	Muskegon.....	Teacher.....	1890
	N. L. Downie.....	North Muskegon.....	Teacher.....	1891
Newaygo.....	John Harwood, Chairman.....	White Cloud.....	Attorney.....	1890
	C. W. Gardner, Secretary.....	Fremont.....	.....	1890
	H. S. Garrison.....	Fremont.....	.....	1891
Oakland	E. R. Webster, Chairman.....	Pontiac.....	Attorney.....	1890
	C. W. Soulbey, Secretary.....	Milford.....	Teacher.....	1890
	Fred Wieland.....	Pontiac.....	County Clerk.....	1891
Oceana.....	F. E. Young, Chairman.....	Hart.....	Teacher.....	1890
	D. E. McClure, Secretary.....	Shelby.....	.....	1890
	G. C. Myers.....	Cromston.....	Farmer.....	1891
Ogemaw.....	A. L. Cumming, Chairman.....	Churchill.....	Teacher.....	1890
	A. E. Sharpe, Secretary.....	West Branch.....	Journalist.....	1890
	F. S. Snodgrass.....	West Branch.....	Attorney.....	1891
Ontonagon.....	A. C. Adair, Chairman.....	Greenland.....	Teacher.....	1890
	N. W. Haire, Secretary.....	Ontonagon.....	Attorney.....	1890
	J. P. Jordan.....	Ontonagon.....	Physician.....	1891
Osceola	A. B. Perrin, Chairman.....	Reed City.....	Teacher.....	1890
	E. H. Wood, Secretary.....	Le Roy.....	.....	1890
	N. H. Walbridge.....	Evart.....	Teacher.....	1891
Oscoda.....	S. H. Hagaman, Chairman.....	Luzerne.....	Farmer.....	1890
	DeWayne Blakely, Secretary.....	Luzerne.....	Teacher.....	1890
	J. J. McCarthy.....	Mio.....	Attorney.....	1891
Otsego	Elijah Warner, Chairman.....	Gaylord.....	Teacher.....	1890
	Miss F. M. Towle, Secretary.....	Gaylord.....	Teacher.....	1890
	Henry Whiteley.....	Gaylord.....	County Clerk.....	1891
Ottawa.....	Miss Cora Goodenow, Chairman.....	Berlin.....	Teacher.....	1890
	C. C. Lillie, Secretary.....	Coopersville.....	Teacher.....	1890
	Alva Sriver.....	Holland City.....	Teacher.....	1891
Presque Isle ...	August Grossman, Chairman.....	Rogers City.....	Farmer.....	1890
	Griffin Covey, Secretary.....	Rogers City.....	Attorney.....	1890
	Geo. T. Maloney.....	Ocqueoc.....	Teacher.....	1891
Roscommon.....	Wm. Rollins, Chairman.....	Roscommon.....	Farmer.....	1890
	H. H. Woodruff, Secretary.....	Roscommon.....	Attorney.....	1890
	James Watson.....	Roscommon.....	Farmer.....	1891
Saginaw.....	Samuel Treby, Chairman.....	Burt.....	Teacher.....	1890
	M. T. Dodge, Secretary.....	East Saginaw.....	Teacher.....	1890
	J. A. F. Streiter.....	Frankenmuth.....	Teacher.....	1891
St. Clair.....	Miss Bina West, Chairman.....	Capac.....	Teacher.....	1890
	E. F. Law, Secretary.....	Yale.....	Teacher.....	1890
	D. R. Fairman.....	St. Clair.....	Teacher.....	1891
St. Joseph.....	John Everett, Chairman.....	Mendon.....	Teacher.....	1890
	Sheridan Osbon, Secretary.....	Sturgis.....	Teacher.....	1890
	J. G. Plowman.....	White Pigeon.....	Teacher.....	1891
Sanilac.....	F. J. Battersbee, Chairman.....	Croswell.....	Teacher.....	1890
	H. C. Morris, Secretary.....	Marlette.....	Attorney.....	1890
	O. L. Messer.....	Marlette.....	Cashier.....	1891
Schoolcraft.....	N. C. Mersereau, Chairman.....	Manistique.....	Teacher.....	1890
	W. F. Riggs, Secretary.....	Manistique.....	Attorney.....	1890
	I. H. Clark.....	Manistique.....	Attorney.....	1891
Shiawassee.....	D. C. Cooper, Chairman.....	Owosso.....	Farmer.....	1890
	Jas. N. McBride, Secretary.....	Owosso.....	Student.....	1890
	Hudson Sheldon.....	Bancroft.....	Teacher.....	1891

TABLE XXVII.—Continued.

Counties.	Names.	Postoffices.	Occupations.	Terms Expire.
Tuscola	W. N. Walton, Chairman	Watrons ville.....	Teacher.....	1890
	H. E. Gordon, Secretary.....	Unionville.....	Teacher.....	1890
	E. D. Diamond.....	May	Teacher.....	1891
Van Buren.....	W. N. McMillan, Chairman	Beclamont.....	Teacher.....	1890
	G. W. Cornish, Secretary.....	Lawton.....	Farmer	1890
	J. A. O'Leary	Decatur.....	Teacher.....	1891
Washtenaw....	M. J. Lehman, Chairman	Chelsea	Attorney.....	1890
	M. J. Cavanaugh, Secretary.....	Ann Arbor.....	Attorney.....	1890
	Arthur Brown.....	Ann Arbor.....	Deputy Co. Clerk..	1891
Wayne.....	J. P. Reed, Chairman.....	Rockford	Physician	1890
	J. E. W. Lumley, Secretary	Detroit.....	Teacher.....	1890
	J. W. Gillespie.....	Dearborn	Teacher.....	1891
Wexford	A. L. Tibbitts, Chairman.....	Cadillac.....	Teacher.....	1890
	H. C. Foxworthy, Secretary.....	Haire	Teacher.....	1890
	L. M. Patterson.....	Cadillac.....	Teacher.....	1891

TABLE XXVIII.

General Statistics of State and Incorporated Institutions, Compiled from Reports of Officers for the Academic Year 1988-9.

Name of institution.	Location.	Date of organization.	Name of Principal, President, or Superintendent.	No. of instructors.	No. of students (or inmates) during year.	No. of graduates at last commencement.	Whole No. of graduates since founded.	No. of volumes in library.	No. of volumes added to library during year.
<i>State:</i>									
University of Michigan.....	Ann Arbor.....	1837	Jas. B. Angell.....	88	1,885	445	9,913	70,041	2,283
Agricultural College.....	Lansing.....	1855	Oscar Clute.....	22	840	48	485	12,586	487
State Normal School.....	Ypsilanti.....	1852	J. M. B. Sill.....	27	808	98	1,644	9,743	998
Michigan Mining School.....	Houghton.....	1856	M. E. Wadsworth.....	5	40	6	6	3,000	-----
Michigan School for the Deaf.....	Flint.....	1854	M. T. Gass.....	25	302	24	255	3,089	76
School for the Blind.....	Lansing.....	1879	Robert Barker.....	9	108	-----	-----	1,562	85
State Reform School.....	Lansing.....	1855	C. A. Gower.....	10	712	-----	-----	2,400	406
Industrial Home for Girls.....	Adrian.....	1879	Margaret Scott.....	* 24	299	-----	-----	723	37
School for Dependent Children.....	Coldwater.....	1871	Wesley Sears.....	6	372	-----	-----	1,825	-----
<i>Incorporated:</i>									
Adrian College.....	Adrian.....	1859	G. B. McElroy.....	10	176	16	336	6,000	500
Albion College.....	Albion.....	1861	L. R. Flake.....	22	460	25	353	7,150	1,150
Alma College.....	Alma.....	-----	Geo. F. Hunting.....	13	177	-----	-----	2,000	2,000
Battle Creek College.....	Battle Creek.....	1874	W. W. Prescott.....	20	534	6	-----	1,350	50
Detroit College.....	Detroit.....	1881	Michael P. Dowling.....	18	265	10	46	6,000	200
Detroit Home and Day School.....	Detroit.....	1882	J. D. Liggett.....	15	253	11	68	1,000	50

* Including all employes.

TABLE XXVIII.—Continued.

Name of institution.	Location.	Date of organization.	Name of Principal, President, or Superintendent.	No. of instructors.	No. of students (or in- mates) during year.	No. of graduates at last commencement.	Whole No. of graduates since founded.	No. of volumes in li- brary.	No. of volumes added to library during year.
<i>Incorporated—(Continued):</i>									
German American Seminary.....	Detroit.....	1861	Stephen Mart.....	5	156	.....	.....	350	10
Hillsdale College.....	Hillsdale.....	1855	Geo. F. Mosher.....	15	447	11	640	7,063	188
Hope College.....	Holland.....	1866	Chas. Scott.....	12	155	9	143	7,925	900
Kalamazoo College.....	Kalamazoo.....	1833	M. A. Wilcox.....	10	181	4	174	8,736	74
Olivet College.....	Olivet.....	1859	H. Q. Butterfield.....	15	277	13	267	16,100	800
Michigan Female Seminary.....	Kalamazoo.....	1856	Isabella G. French.....	7	50	.....	107	1,530	100
Michigan Military Academy.....	Orchard Lake.....	1877	J. Sumner Rogers.....	10	184	19	183	.....	.....
Raisin Valley Seminary.....	Adrian.....	1863	F. R. Hathaway.....	3	100	8	95	500	.....
*Somerville School.....	St. Clair.....	1881	.....	.....	.....	.....	.....	.....	.....
Spring Arbor Seminary.....	Spring Arbor.....	1872	A. H. Stilwell.....	5	127	3	43	350	.....

* This school was closed during the year.

TABLE XXIX.

Financial Statistics of State and Incorporated Institutions, compiled from Reports of Officers for the Academic Year 1888-9.

STATE AND INCORPORATED INSTITUTIONS.

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Institutions.	Annual cost of tuition per student.	Average cost of board per week.	Total average cost per student (to the student).	Total average cost per student (to the State).	Estimated value of grounds, buildings, apparatus, etc.	Amount of productive funds.	Income from productive funds.	Amount of legislative appropriation for the year 1889.	Receipts from tuition fees during the year.	Receipts from all other sources.	Current expenses for the year.	Expenses for permanent improvements.	Liabilities.
<i>State:</i>													
University of Michigan.....	\$30 00	* \$4 00	\$190 00	\$52 24	\$1,000,000 00	\$544,151 66	\$38,500 00	\$116,089 08	\$87,515 88	\$158,912 19	\$176,538 49	\$70,889 08	.....
Agricultural College.....	\$ 15 00	2 35	110 00	40 00	450,000 00	454,636 07	81,888 12	16,798 00	867 50	9,856 68	45,289 97	28,000 00	.....
State Normal School.....	** 10 00	2 50	125 00	61 56	204,500 00	.....	4,286 50	42,875 00	4,620 00	706 18	1148,486 82	1122,050 85	.....
Michigan Mining School.....	.....	a 25 00	300 00	487 50	100,000 00	.....	.....	17,500 00	.....	.....	17,500 00	6,000 00	.....
Michigan School for the Deaf.....	.....	1 00	.....	189 00	500,000 00	.....	.....	52,000 00	.....	.....	56,500 00	6,000 00	.....
Michigan School for the Blind.....	.....	.....	.....	225 78	225,257 28	.....	.....	28,356 25	.....	1,910 57	28,250 17	.....	.....
State Reform School.....	.....	.....	.....	74 43	235,000 00	.....	.....	53,000 00	.....	15,277 11	64,429 10	683 75	.....
State Industrial Home for Girls.....	.....	56	.....	186 20	182,968 55	2,125 23	99 14	88,901 00	.....	1,360 24	87,962 87	16,153 23	.....
State Public School.....	.....	.....	.....	61 89	220,981 58	.....	.....	84,000 00	.....	.....	34,198 85	8,000 00	.....
<i>Incorporated:</i>													
Adrian College.....	b 28 50	2 00	.....	.....	125,000 00	91,443 44	6,000 00	.....	8,860 86	4,984 00	10,450 00	1,088 65	\$22,805 64
Albion College.....	.....	2 00	.....	.....	100,000 00	220,000 00	17,000 00	.....	c 8,500 00	.....	25,500 00	500 00	18,000 00
Alma College.....	20 40	2 25	.....	.....	63,500 00	50,000 00	3,500 00	.....	2,450 00	27,550 00	15,600 00	16,000 00	6,000 00
Battle Creek College.....	85 00	d 2 75	.....	.....	109,638 35	.....	.....	.....	4,875 45	23,908 24	26,821 79	1,000 00	43,057 66
Detroit College.....	40 00	.....	.....	.....	100,000 00	.....	.....	.....	6,788 00	6,978 19	12,523 81	18,000 00	58,225 00
Detroit Home and Day School.....	50 00 100 00	10 00	.....	.....	50,000 00	.....	.....	.....	15,000 00	9,467 45	23,542 68	600 00	.....
German American Seminary.....	15 00	.....	.....	.....	25,000 00	.....	.....	.....	1,893 00	.....	2,150 00	132 00	6,000 00
Hillsdale College.....	.....	2 00	.....	.....	105,000 00	155,000 00	10,209 55	.....	e 88 75	2,899 12	15,490 80	250 00	.....

PROCEEDINGS
AT THE
SECOND ANNUAL MEETING
OF
SECRETARIES
OF
COUNTY BOARDS OF SCHOOL EXAMINERS.
HELD AT LANSING, DEC. 25 AND 26, 1889.

MEETING OF COUNTY SECRETARIES.

Lansing, Mich., Dec. 25, 1889.

Secretary Orr Schurtz, president of the association, called the meeting to order at 8 o'clock P. M., in the Senate Chamber.

He stated that Dr. Fiske, president of the State Teachers' Association, had extended an invitation to the members of the Secretaries' Association to meet with them in their opening exercises. The invitation was accepted and, on motion, the meeting adjourned to the House Chamber.

Reassembled in the Senate Chamber at 8:30 o'clock. President Schurtz then introduced Gov. Cyrus G. Luce, who addressed the association.

The warm applause given at different times during this address indicated that it was well received.

President Schurtz then gave his address.

At the close of President Schurtz's address, which was thoroughly appreciated by all of the secretaries present, State Superintendent Estabrook was called for and made a short talk upon the interpretation of the school law, relating to examinations, supervision, etc.

The roll was then called and the following secretaries responded:

Barry.....	Enoch Andrus	Lapeer.....	C. E. Palmerlee
Bay.....	J. E. Kinnane	Livingston.....	S. D. Williams
Branch.....	B. S. Spofford	Luce.....	C. A. Dean
Berrien.....	Miss Rachel Tate	Macomb.....	S. B. Russell
Calhoun.....	R. A. Culver	Mecosta.....	P. M. Brown
Clinton.....	R. M. Winston	Montcalm.....	E. J. Quackenbush
Eaton.....	Orr Schurtz	Muskegon.....	H. A. Lewis
Genesee.....	E. D. Black	Manistee.....	H. L. Parker*
Gratiot.....	O. G. Tuttle	Newaygo.....	C. W. Gardner
Ingham.....	T. A. Stephens	Oceana.....	D. E. McClure
Ionia.....	C. L. Bemis	Ottawa.....	C. C. Lillie
Iosco.....	S. B. Laird	St. Clair.....	E. F. Law
Jackson.....	D. E. Haskins	Shiawassee.....	J. N. McBride
Kalamazoo.....	Ashley Clapp	Tuscola.....	H. E. Gordon
Kent.....	A. H. Smith	Van Buren.....	G. W. Cornish

On motion of Secretary R. A. Culver the meeting adjourned until 9 o'clock Thursday morning.

* Member of examining board.

Thursday morning session opened with vocal music by Prof. Pigott.

Secretary R. A. Culver of Calhoun county then read a paper. Subject—"The Secretary's Visit; How can it be made most Profitable to the Teacher?"

The discussion was opened by Secretary E. D. Black of Genesee. He thought all secretaries should be courteous and not thrust themselves upon a teacher unannounced; should assist teachers with suggestions in regard to grading and classifying pupils. Also, consult with district school officers.

Secretary McClure, of Oceana, would be courteous by entering school room without formality. Should not only suggest, but be executive officers. That the use of the dictionary should be taught to be as essential as the use of a broom.

Secretary Brown, of Mecosta, thought where a teacher was doing well "to let well enough alone." That much good would result from holding local teachers' meetings.

Secretary Lillie, of Ottawa, agreed with the paper and thought the schools would be very much benefited if we followed the suggestions.

Secretary Kinnane, of Bay, would reach the board through the influence of the teacher. Would praise a young teacher and not criticise too much at first.

Mr. Gorsline, member of examining board of Calhoun, asked Secretary Black if he would turn classes back. The reply was, not to be arbitrary, but persuade pupils to go back.

Secretary Smith, of Kent, had received many thanks from his teachers for assisting them in classifying and grading the school.

Secretary Gardner, of Newaygo, thought the teacher's work in the school room indicated what his home surroundings were. That the teacher's contract should be made in triplicate, one to be sent to the county secretary.

Secretary Schurtz, of Eaton, would endeavor to impress upon the teachers at all times the idea that you want to help them. That when you show them what is right and what is wrong that it be done so that you impress them with your individuality.

A short recess was taken, after which a change in the programme was made and Supt. Shawhan, of Illinois, addressed the meeting upon this topic: "County Supervision."

We regret that Mr. Shawhan was unable to furnish a manuscript, but we give some of the leading points that were made, viz.: County supervision, to be a success, must have some basis of work that is founded upon a rock, and that in his judgment this rock was a course of study and thorough classification. That secretaries must have a complete idea of what they want to do and energy to do it. That the course of study should be uniform in the State, so that all secretaries may have a common ground upon which to base their work. The course of study should take the child at six years, and be adapted to the degrees of development during his school life. The teacher is simply used to present the necessary facts in the different stages of development, but that God Almighty develops the child. The teacher must know how and what to do before he can expect the child to do it. That the live teacher can always find a way to secure the necessary school apparatus, such as globes, maps, charts, etc. Teachers must be required to know how to use such apparatus and feel the need of them. Then they will be forthcoming. The secretary must not expect to reform all of the evils

in one year, but must aim to bring about small changes at first and create such an interest that the larger changes must follow. Would use the public press, and in that way keep constantly before the teachers and patrons all questions relating to educational matters. The course of study should be strictly adhered to. That the diploma from a district school should admit the graduate to the high school of the county, and perhaps to the second or third year in the course. That the work of the county secretary requires that he shall be a man of brains and of indomitable will, push and energy.

We would infer that Supt. Shawhan has some, if not all, of the above requisites, and that he is successful in his work, as he has been superintendent of Champaign county, Ill., for the past eight years.

On motion, the president appointed C. E. Palmerlee, R. A. Culver and J. N. McBride committee on officers.

Meeting then adjourned until 2 P. M.

Afternoon session called to order at 2 o'clock by the president.

The chairman of the committee on officers reported that the following named persons be the officers of the association for the ensuing year:

ORR SCHURTZ, of Eaton county, President.

B. S. SPOFFORD, of Branch county, Vice President.

C. L. BEMIS, of Ionia county, Secretary and Treasurer.

On motion, the report of the committee was accepted and adopted and committee discharged.

On motion, President Schurtz was appointed editor of the secretaries' department of the "Michigan School Moderator."

Secretary Bemis made a motion, which was supported and carried, that "it is the sense of this meeting that secretaries do all in their power to push the question of reading circles."

Secretary Haskins made a motion, which was supported and carried, that the president appoint a committee of five to develop a plan for making the work of the reading circle a success.

The president appointed the committee as follows: D. E. Haskins, of Jackson county; C. E. Palmerlee, of Lapeer county; A. H. Smith, of Kent county; Ashley Clapp, of Kalamazoo county; R. A. Culver, of Calhoun county.

On motion of Secretary McBride, which was supported and carried, the following named persons were appointed by the president as committee on school legislation: J. N. McBride, of Shiawassee county; B. S. Spofford, of Branch county; C. L. Bemis, of Ionia county.

At this time President Schurtz informed the secretaries that an invitation had been extended to them to attend a reception given by Gov. and Mrs. Luce at 6:30 o'clock P. M. The invitation was accepted.

Secretary J. N. McBride then read a paper. Subject: "Uniformity in Supervision by County Secretaries."

There was no discussion of the above paper, and the next topic, "How May the Country School Teacher be Induced to Study Methods," by Secretary C. E. Palmerlee, was taken up. Some of the points made were as follows:

Chance will not make a teacher. The active, studious teacher will succeed. The wise teacher will profit by criticism from the visiting official. It is much easier to advise a good teacher than a poor one. If improvement does not follow correction, the teacher should be made to give up. The teachers'

institutes are a good means of informing teachers in educational principles. Teachers' meetings and associations are means to the same ends, and teachers should be encouraged to attend.

The discussion was opened by Secretary R. M. Winston, of Clinton county.

The teacher should be told in a friendly way that his method is not the only one in use, and that perhaps it is not the best. That in order to make his work a success he should study the methods of other teachers and read books upon theory and practice of teaching. No secretary *should* or *could* make a walking normal of himself. That in a visit of two hours he could form as correct an opinion of the condition of the school and the success of the teacher as he could in a visit of six hours. Would use public opinion as a spur to make the teacher do better work. Would urge the teacher to continually keep the question "of school supplies and apparatus" before the district board. Also that the teacher derived much from attending teachers' meetings.

Secretary Smith, of Kent, thought that township teachers' meetings, held in different parts of the county, were of inestimable value.

Secretary Williams, of Livingston, did not approve of the present system of conducting the State institutes. That for the amount of money expended they did not receive the required results. In his county last year the expense of the State institute was \$358.57, and as far as he could judge no particular good came from it.

Secretary Law, of St. Clair, excused teachers from three subjects if they had at a previous examination secured a standing of 80 per cent., provided they passed a satisfactory examination in "White's Pedagogy."

Secretary Spofford, of Branch, thought it would be a good thing to do as Secretary Law was doing, but questioned the legality of certificates issued under such considerations.

Secretary Bemis, of Ionia, thought the State institute was the life of the county. In his county they held a four weeks' institute in 1888, and a three weeks' institute in 1889, and that they had value received for all the money that was expended. Would favor the plan of granting a certificate (without examination) to any teacher who had taught two years in one district and was re-engaged for the third year, or to any teacher who had graded his school in one year and was retained for the second year, provided they prepare and read at least one paper during the year at the county association meeting.

Secretary Williams thought a one week's institute would not result in any good in Livingston county.

Secretary Kinnane, of Bay, said one week's institute was better than none at all.

Secretary McClure, of Oceana, had more than fifty teachers in the reading circles of his county, and thought that any teacher that was a member of a reading circle was sure to improve in methods.

Secretary Haskins, of Jackson, did not believe in running down the institute. Thought they were a benefit and set teachers to thinking.

Secretary Schurtz, of Eaton, said the work in some institutes in the past had been a random firing down the whole line, but that he believed such institutes were few and far between.

Secretary Olapp, of Kalamazoo, would favor dropping county and town-

ship association work next year and taking up reading circle work in its place.

Secretary Kinpane, of Bay, moved that the president appoint a committee of three to confer with Supt. Estabrook in regard to his suggesting some book or books for reading circle work, upon which the questions in theory and art of teaching shall be based.

The above motion was approved and the president appointed S. D. Williams, of Livingston, Ashley Clapp, of Kalamazoo, and D. E. McClure, of Oceana, as such committee.

On motion, the fixing of the time and place for holding the next meeting was left with the executive committee.

The president was instructed to appoint a committee of five, of which he should be chairman, to confer with Supt. Estabrook about arranging a manual of study for use in the district schools of the State. The members of this committee are Orr Schurtz, of Eaton; R. A. Culver, of Calhoun; C. L. Bemis, of Ionia.

The financial report of the secretary shows the following:

RECEIPTS.

Annual \$1.00 dues paid in.....	\$36 00
Amount of collection.....	7 20
Total receipts.....	<u>\$43 20</u>

DISBURSEMENTS.

1889.		
Aug. 17.	Printing, postage and envelopes.....	\$2 50
Oct. 18.	Expense of Secretary to and at Lansing and return.....	6 10
24.	Printing, postage and envelopes.....	2 50
Nov. 30.	Programs, postage and envelopes.....	5 90
Dec. 26.	Paid Supt. G. R. Shawhan.....	20 00
	Paid for music.....	3 00
	Balance on hand.....	8 20
		<u>43 20</u>

On motion the meeting adjourned.

B. S. SPOFFORD,
Secretary State Secretaries' Association.

ADDRESS OF WELCOME.

BY HON. CYRUS G. LUCE, GOVERNOR OF MICHIGAN.

Mr. President, Ladies and Gentlemen:

To welcome assemblages of people to the capitol is one of the executive prerogatives, and it has been my privilege for the past three years to address words of welcome to many assemblages—to pioneers, farmers, Grand Army men, lawyers, doctors, preachers and laborers to these assembly halls. And now, on this occasion, it affords me great pleasure to welcome you to this Senate Chamber. I welcome you more heartily because you are young as an organization; and again because the law which authorizes you to come here as secretaries was approved by the present executive. It was approved notwithstanding some of its provisions were unnatural and clumsy; yet, at the same time, there were good provisions sufficient to justify its becoming a law, and I watch, as a parent watches its child, the results of that law upon the common schools of this State.

I welcome you again with great pleasure because you, more than any other assembly that comes here, represent the country or rural schools. I have lived almost all the years of a long and active life in the country. I have attended school in the country—yes, in the old log schoolhouse of the years ago. I am loyal in every fiber of my existence to the country schools. I welcome you partly because you have the supervision of the schools in the rural districts. I welcome you because you represent one of the most important, if not the most important, of the professions. I have thought as I have listened to lectures that there was a disposition sometimes manifest to underrate the country school, or the importance of the work that it is doing, that it has done in the past, and that it is to do in the years to come. I wish to impress upon your minds this great truth: That the men who have made this great State of ours what it is were, to a large extent, educated in the country schools. They came from the east from the country schoolhouses; they came here and hewed out homes in the great forests. Whatever may be their condition today, or in the years to come, they will not forget what they owe to the country schools.

I welcome you again because the men in the cities, as well as in the country, who are controlling our destinies at the present time, were educated in schools similar to those over which you have partial control. They may have been polished off in the higher schools and universities, but they laid

deep and broad the foundation of their energy and power in the country schoolhouse. So we are all interested in the prosperity and success of the rural schools.

Pardon me for a few suggestions which I would like to make to you secretaries. I never taught school, and it is some years since I attended school, but I have kept up an intimate acquaintance with the schoolhouse. In the report of the Superintendent of Public Instruction for 1888, I notice several keen criticisms (probably they may be deserved) upon the citizens of districts because they do not visit the schools and interest themselves in its welfare or in the competency of the teacher, or even in the education of their children. It is possibly a just criticism; but in making suggestions to you, I would ask you to be politic. Do not criticise too severely. We have this law, and we want it to produce the best possible results; and in order to do that we must work in harmony with the teachers, parents and patrons of the schools. Of all the laws and systems that ought not to be changed oftener than is necessary, the school law and system stand first and foremost. So many people are affected by it, and must learn the law to become familiar with its provisions in order to discharge their duties. So do not, please, urge too many changes. And, indeed, it is not exactly your duty to urge changes in the law at all. Your duty is to execute the law to the best possible advantage; study and suggest as you will to the people of the district, and to the teachers, but do not try to make too many changes in the law of established system.

Now I am not going to deal out the kind of advice or instruction you should give to the teachers, nor shall I say anything about examinations or any of those things, but I want to make one suggestion in relation to *management*, which comes within your jurisdiction. For fifty years I lived on the State line, where I could see the State of Indiana every day from my door, and I am about as familiar with the Indiana school system as with ours, and they have adopted one method that is of more use to the country schools than any other one thing I know of. They require the teachers in every township to hold monthly institutes of their own, and the teachers are obliged to use one of the holidays during each month in attending these institutes. In these meetings the teachers are constantly discussing the various questions that are continually arising. More good is derived from that one thing, in my judgment, than any other one thing adopted to benefit the country schools. Now I notice in this report here that criticism is made upon the teachers for want of methods and general knowledge. Nothing will stimulate their ambition to acquire general knowledge as much as does that township institute that may be held every month. I want to commend that to your consideration. You know more about schools than I do, but interest in the common schools of the country, my belief in the country schools, induces me to urge this suggestion upon the meeting. Intelligent institute work is valuable to the teacher as well as to the scholar, wherever held; and besides this, it interests the patrons in the school, and much more does it do this where the teachers of each township gather together and the work is brought right down to the most interested communities. It also stimulates personal, individual effort on the part of the teachers. All must be made to feel this personal responsibility, in the schoolroom as well as in society, if we are to realize the best results from our efforts. The township institute affords the required opportunity for

the exercise of this personal responsibility. Thought and action are stimulated possibly to a greater extent than where larger numbers come together, because in the township institute all must be constant workers; meetings are frequent.

You may fill a teacher up so full that he runs over with knowledge, yet if it is not drawn out, if they have not learned to use it, to tell it, to impart it and impress it upon others, it is of but little avail for teaching purposes. And this is just what the well conducted institute does for the teacher. I want to commend this township institute system to your careful consideration.

I want again to say that I heartily welcome you here for the reasons named, and for many not named. And let me repeat, be politic. Remember the old saying: "You can catch more flies with molasses than vinegar." Use the same policy that a politician would use when he wants people to vote for him. I never was a politician, but I know they sometimes have a way of achieving success.

People are very apt to criticise the country school; they will select some defects—say a town superintendent will spell "potato" with two syllables. That is not a just criterion, or fair illustration, of the country school. I know there are some poor schools and ignorant men for school officers, but this is not true in all or a large part of our schools. There is one respect in which the country school stands above the average city school: So far as the average moral standard of the boys and girls who attend the country school is concerned, it shines out brightly; and for that reason, that so much of the moral force is found in the country school, I am more anxious that they should be cultivated intellectually. I will say we have a most excellent school here, across the river; it is the best of the kind in America, in my opinion. They have today 493 boys in that school, and less than 30 of them came from the country schools; 96 per cent from the city, and most of them from schools, too. I do not mean that they are educated in crime at the city schools, but temptation in the city is much greater. Besides this the boys, and girls too, who attend country schools, are generally afforded a glorious opportunity to work, and this is greatly desired by many of the best educators for those who attend city schools.

Again, thrice welcome to you who are so closely identified with the foundation of the educational institutions of our magnificent commonwealth.

PRESIDENT'S ADDRESS.

SECRETARY ORR SCHURTZ, CHARLOTTE.

In a circular letter sent out some three months ago, calling attention to this meeting and suggesting certain arrangements for it, the statement was made that the county secretaries of Michigan have the power to say who shall teach over half the children of this State. That statement is true, my friends, and it is a statement whose truth carries with it a mighty weight of responsibility for us individually and collectively, a statement that ought to stir up in us the liveliest sense of duty, the keenest desire to meet this great responsibility and discharge its requirements with utmost consecration and devotion. It ought to spur on to renewed exertions those who are already striving to do their best. It ought to strike solemn conviction of wrong to the hearts of any who may be engaged in the work from selfish interests; a conviction that will cry out and make itself heard until such an one shall yield to the promptings of his better nature, and give place to him who is better fitted, both by inclination and ability, to discharge these obligations.

Yes, ours is not only the *power* to say who shall *teach* over half the children of this State, but the *responsibility* also of saying who shall teach them, and, what is of even more importance, the power and accompanying responsibility of saying *how* these children shall be taught. So grave a responsibility rests upon no other class of men in the State engaged in educational work, save superintendents of perhaps ten or twelve of the largest city schools. The secretary's scope of work and the consequent demands made upon him, compared with that of the *average* graded school principal or superintendent, is as the height of a mountain compared with that of a mole hill. I assert this in no spirit of narrow braggadocio, with no desire to exalt the secretary to the disparagement of the graded school principal or superintendent, with no spirit of unfairness or invidious comparison, but because it is the plain, unaffected truth that should hurt no one, and because of its immediate bearing on some things I am minded to say.

If, then, you grant me the truth of this proposition as a premise, viz.: that the secretary must face duties, demands and responsibilities beyond those imposed upon the head of the average graded school, what follows as the most natural consequence? Obviously, that the former should be even

better equipped for his work than the latter. If the demands upon him are greater, should he not be better prepared, better trained, better skilled in methods and practical experience to meet the needs of the work in hand? It requires far greater tact, greater skill, greater experience, a more intimate knowledge of military affairs to enable a man to command successfully an army than to lead a company, a regiment or a brigade. There must be ready familiarity with *elementary principles* in all these offices, the highest as well as the lowest, but for the first there must be much beyond this. It is a comparatively easy matter to command a regiment, but a mighty responsibility to lead a great army. It is one thing to lead and direct a handful of teachers, it is quite another thing to lead five or ten scores, and that, too, under far less encouraging circumstances; and the man who attains to even a fair measure of success under the latter conditions must be a man who knows and understands what is required of him, who has the tact, the training, the experience, the ability to accomplish it. Can you think for a moment that the graded school system in Michigan could ever have attained to its present excellence were it the custom to select and put in charge of these schools men from this, that and the other calling, regardless of not only sound mental attainments, but also of the merest rudiments of professional knowledge necessary to fit them for such positions? Even with the present excellent condition of these schools, should public opinion suffer the order of things to be reversed, how long would it be before the entire fabric which has consumed years in slow, painstaking building would totter and fall a heap of sorrowful ruins? These schools are what they are because those in charge of them are trained to the work, because they have gathered at great cost of time and money the mental tools necessary to do this work, and then by careful examination, study and actual experience have learned how to use these in educating the young, and knowing how to use them themselves, they are competent to direct others in their use. It is a matter of knowledge, born of much study and experience.

So, it seems plain to me, my friends, that if we as secretaries, upon whom rests the responsibility of building up that part of our common school system ordinarily known as the district school, hope to accomplish lasting results, if we are to make the present system of supervision acceptable to and popular with the public, those among whom our work lies, we must subscribe to the proposition that the secretary should be a man of scholarly attainments, and a man experienced in the actual work of school supervision. Not only this, but he should give his whole time and energy to the work—save where the county is too small. In my opinion, in a county whose schools number 100, if the secretary does not give his whole time and attention to the schools, to the exclusion of any other business, he should not complain if he does not command the respect of teachers and the public. If I should say what is in my heart to say, I should add, he is not *entitled* to respect any more than he is entitled to draw the salary he has not earned. To accept a public duty fraught with such far-reaching results to the youth of the land, a duty so sacred, a duty that should call out the very best in a man morally and physically—to accept, I say, so important a public trust, and then fail to meet its requirements, either through negligence or lack of ability, is little short of criminal. Nor may such hide behind the plea that the salary is too small to warrant a complete consecration of one's energies. We have no word of censure too severe for the *teacher* who fails one jot or

tittle of duty because the pay is not as large as he thinks he ought to have. We look upon teaching much as we look upon preaching. The extent of duty in both is limited only by the powers of the body and the brain. It cannot be measured in cold dollars and cents. The true preacher of Christ will save as many souls on \$1,000 a year as he will on \$10,000. It is the salvation of men's souls that concerns him. It is the eternal welfare of the child, his future usefulness to himself and society that concerns the teacher, and the question of remuneration must not be weighed in balance to the detriment of the child when once the teacher has accepted the sacred trust, we say, and truly too.

So, too, it is with us. We have no shadow of right to accept this office, and then whine about the salary, neglecting its burdensome and perplexing duties, and cloaking such shamelessness under so frivolous an excuse. Let us remember that in accepting the salary we accept the accompanying emoluments, viz.: unlimited hard work, countless trials and criticisms, misrepresentation, and sometimes persecution. But these we must be prepared to accept, not forgetting that in this world the bitter always goes with the sweet. Not to dwell too long upon this, I wish to leave this thought with you,—if it be necessary as a condition to success in the graded schools that he who plans, directs and supervises should be trained with that purpose in view, and should devote every energy of mind and body to the work, is it not much more needful here, where the secretary is truly a superintendent, and where everything depends on him as a leader, counselor and guide?

The key-note to success in any undertaking is a clear understanding of all the conditions that surround us. If this be true, how better may we fortify ourselves to supervise the schools of our county to the best advantage than by boldly facing and investigating the conditions that manifest themselves?

First, then, I think we must concede that the county secretaryship is neither understood nor appreciated by—1st, school patrons and the public in general; 2d, by teachers who come under its provisions; 3d, by some secretaries themselves, I fear.

Let us consider each of these briefly.

Is it at all strange that school patrons and the public do not understand, and consequently fail to appreciate, what this system is capable of accomplishing for them? Why, there is nothing whatever strange about it. It is, in fact, most natural. It is exactly the same in the smaller graded schools. This, my fellow secretaries, I think, is made quite plain to us as we come in contact with these schools in the course of our work, and that, too, sometimes in villages that lay claim to being pretty good sized towns. Sometimes I am forced to believe that there is but one thing on earth that people will stand so much humbuggery about, and really appear to enjoy, as the education of their children, and that one thing is the quack doctor. The quack teacher and the quack doctor, I am afraid, are bound to grow fat and flourish to the end of time. It is a question whether these two will lose their occupations even when Gabriel's trump shall sound. The lecherous quack dies hard.

But I have noticed one encouraging thing, that when intelligent school management and supervision once gets a fair trial, and remains just long enough for a community, whether town or country, to get one good taste of

it, the flavor, like that of the Chinaman's roast pig, haunts until a continuous feast of the same alone satisfies.

The people must be made to understand the difference between good and poor schools, to discriminate between the false and the true. This must be accomplished, not by ridicule, not by obstinate and ill-timed interference. It must be done by respectful but firm argument, by kindly proof, by reasonable agitation, by obtaining results that speak for themselves; by taking, rousing leadership; by ample evidence, known and seen of all men that the secretary is alive to all the educational interests of his county; by united, harmonious effort of teachers and secretary; by individuality on the part of the secretary, an individuality that makes itself felt in the county from center to circumference.

If we compare the schools of a village that has had small but steady growth from year to year, with a country school in a neighborhood that has had a corresponding growth, generally a marked contrast will appear. As in the village we see better stores, better houses, churches, streets, etc., so in the country we observe more beautiful and valuable farms, handsome and costly houses, barns and other buildings. These farms are all well provided with the very latest and best machinery. The dwellings are handsomely furnished. In all these particulars the farm has kept pace with the village. When, however, you come to the schoolhouses and school apparatus, what a change! What should cause this? In the one is steady growth and system, in the other the entire absence of both.

Recently I visited the place of my birth, and early school life. It was the saddest return that I had ever known, for an aged and well beloved father lay upon his last bed of pain and sorrow, and a large family of sons, some of them already having come to the prime of life, now passing toward the shadowy goal which is the end of all flesh, had gathered home. In company with some of these, whose childhood sports had been shared by me, I visited the old homestead. At such a moment our early lives, freighted with the earliest and tenderest recollections, pass in hurried scenes before us. The broad, beautiful fields, the yards and the trees painted us a picture crowded with tints and shadows and realities of the days that had vanished. What more natural than that the return should be planned to take us past the old schoolhouse where twenty-six years ago, in the woods then surrounding that red schoolhouse, with guns fashioned from sections of good sized hickory saplings, tipped with stout bayonets, we re-enacted the bloody battles of the civil war, then in progress. Now these woods had been swept away by the keen-bladed ax. The surrounding country had grown richer and more beautiful. Ah, the change all about us! Changes for the better, though, betokening prosperity and wealth on every hand. Just across the roadway, and facing the schoolhouse, had sprung up a neat, comfortable church, well painted and well preserved. But the schoolhouse! Was it but yesterday we sat within and thumped our restless little heels against the box-enclosed seats? Surely that was the same weather-beaten, red exterior, the same dirty-white, solid blinds. No painter's brush had desecrated their familiar faces. And as we mounted to a window and threw back the blind, we saw the room with all its well-remembered surroundings. The same old high-backed, knife-hacked, wooden desks and bare walls,—and nothing more. Twenty-six years had wrought a mighty change in us, and in everything about us, but the old red schoolhouse stood as if defying the strong hand of

time and decay. I doubt not, too, that the children who go there to drink at the fount of knowledge draw their meager supply from the same muddy pool that filled, but did not satisfy us, and I thought, as we left this old landmark behind us, "Can this be possible in such a grand age of progress as the present?" And yet there are hundreds of such schoolhouses all over this State.

Could the people understand the importance of thorough supervision, the necessity of well-prepared teachers, of good apparatus, so far as their own vital interests are concerned, we should have no more of foolish economy that delays and stunts and blasts the fruitage that should be gathered. In my opinion no class of people in this country need to train their children more carefully and thoroughly in all that may make them clear-headed, practical thinkers and reasoners, that may give them a deep and abiding faith in rights of the common people, that may teach them to discriminate in favor of their own interests against the growing tendencies toward absorption of wealth and power by the few—in a word, that may give the rural population that happy balance of power that, in all the brief past years of this government, they have wielded so grandly to the upbuilding and perpetuation of all that is noblest, and greatest and most blessed in human government. The farm has given us a majority of the noblest and grandest men this government has produced in statesmanship, in generalship, in inventive genius, in literature, in law, in medicine, in business. The question for the farmer to consider and weigh well today is,—shall I give my child that extra advantage in mind cultivation, in education, that the rush and push and ceaseless strife of the world, as now constituted, demands of all who would keep pace with this onward movement, or shall I give him but a moiety of the advantages the village and the city boy has to make him a being of superior strength of mind and training?

Every tendency at present is toward separation of trades and professions into classes for self-advancement and self-protection. The farmer feels he is being driven into a condition that compels him to fraternize with those of his own calling as a matter of self-protection. He needs to strengthen himself at every turn. What can be of more strength to him than to build him up a school system that shall give his children that intellectual strength that will enable them to measure force with the strongest, to meet and lay bare the sophistries and lying misrepresentations of politicians.

It is for us, my friends, to arouse the attention of these people, to lead them to regard their schools in the proper light, and thus induce them to lay aside a wasteful economy that saps the very life out of what ought to be their greatest tower of strength.

THE SECRETARY'S VISIT, HOW CAN IT BE MADE MOST PROFITABLE TO THE TEACHER?

SECRETARY R. A. CULVER, CALHOUN COUNTY.

I believe the *desideratum* for our country schools is centralization in management, with individuality in teaching. No great manufacturing enterprise could long exist without a master workman who is thoroughly acquainted with every detail of the enterprise. A great railway system, with all its nicely adjusted divisions working in harmony, is the consummation of the plans of the manager. A school system, with all its various branches of work of education, having for its purpose the elevation of mankind, is the creation of an individual. Where the centralization of management should begin and where it should end, whether we should have more State, county or township authority, are questions for consideration by thoughtful school managers. From my experience in school work, and after thoughtfully considering the matter, I am of the opinion that each secretary, manager or superintendent of schools should be limited in number of schools and territory over which he travels. The maximum number of schools should not exceed one hundred and the territory should not be more than five hundred seventy-six square miles. The secretary should have more authoritative management. While I would place all reasonable limitations upon the financial management of the school, while I would give the district board or the township board the power to raise funds, to purchase needed supplies, to employ teachers, compensating them according to grade, as classified by the examining board, and to build and repair school buildings, I would give the secretary the authority to say what course of study shall be pursued, to map out the entire work in all the schools under his jurisdiction; the power to require school boards to purchase needed supplies, such as dictionaries, maps, clocks, blackboards, erasers; to require school boards to make needed repairs, in other words to build up a uniform and excellent management of schools under his jurisdiction. Let me compare two or three quotations from sections of the school law relating to school boards with two or three quotations from sections relating to the secretary, and see if the school law does not need a little repair and adjustment before the secretary can bring his influence to bear upon teacher and school board with telling effect.

See Chapter XIII.

SECTION 13. The district board shall hire and contract with such duly qualified teachers as may be required.

SEC. 14. The district board shall have the care and custody of the schoolhouse and other property of the district.

SEC. 15. The district board shall specify the studies to be pursued in the schools of the district.

SEC. 17. The district board shall have the general care of the school, and shall make and enforce suitable rules and regulations for its government and management.

See Chapter XII.

SECTION 9. It shall be the duty of the secretary of the board of school examiners :

7th. To visit each of the schools in his county at least once each year, and to examine carefully the discipline, the mode of instruction, and the progress and proficiency of the pupils.

8th. To counsel with the teachers and school boards as to the course of study to be pursued, and as to any improvement in discipline and instruction in the schools.

9th. To note the condition of the schoolhouses and appurtenances thereto, and to suggest plans for new houses to be erected, and for warming and ventilating, and for the general improvement of schoolhouses and grounds.

10th. To promote, by such means as he may devise, subject to the advice of the board of school examiners, the improvement of the schools in his county and the elevation of the character and qualifications of the teachers and officers thereof.

After carefully reading the above sections and paragraphs many secretaries come to the conclusion that the authority, the power to regulate the schools, lies entirely with the school board; that the secretary with the aid of the examining board is an advisory committee, and his duties are to visit, to examine, to counsel, to note, to suggest, and to promote, but never to pass authoritatively upon any question of school management, except upon the qualifications of a candidate for a certificate; in other words, that the secretary is the school barometer, and is passed from school to school to indicate and register all the changes in the atmosphere of the school. If we hold to such an opinion and interpretation of school law, how can the secretary's visit be made profitable to the teacher who, while well qualified intellectually and morally, through indifference, or because of the opposition of the school board, steadily refuses to accept of any of the modern ideas, practices or theories of the profession? Perhaps many of us think the remedy should be in the knife, that all such teachers should be promptly decapitated at the first public examination; but it is very difficult to meet the persistent demands of the school board who argue that the candidate is well qualified to teach their school.

While noticing some of the imperfections of school law, the unfair division of authority and management, allow me to mention one or two observations in my personal experience which convince me that much school work and school life is rendered unprofitable by these conditions.

During the present winter one of the most ordinary teachers in Calhoun county, a man who cannot rise above his situation, who teaches the a, b, c's in the good old fashioned way—in fact, you cannot convince him that there

is any other way—who is making more poor readers than any other teacher in the county, is receiving thirty-five dollars per month, while the best teacher I have found so far, one who is bright, sparkling, industrious, working in season and out of season, reading everything obtainable on school work, who is teaching the boys and girls under her care how to talk, how to think, and how to act like gentlemen and ladies, is receiving twenty-six dollars per month. No argument of mine can convince the one school board that they have a perfect treasure, or the other school board that they have an elephant on their hands. Again, some of the wealthiest school districts, having fair sized schools, are persistent in their demands for the cheapest teachers, and make no provision whatever for apparatus or for the improvement of school buildings. Two remedies have been suggested to my mind that will do away with much unfair discrimination in the employment of teachers and give a more direct interest in the prosperity and success of the school. We should secure two amendments to the school law, with the following sentiments:

No school board shall employ or hire any teacher who is a brother or sister, son or daughter of any member of said school board. Of every school board composed of three members, at least two of the members of said board at the time of election must have one or more children, by birth or legal adoption, between five and eighteen years of age.

A large proportion of the secretaries in the State, if I am correctly informed, have given a very liberal interpretation to paragraph ten, quoted above, which reads: "To promote by such means as he may devise, subject to the advice of the board of school examiners, the improvement of the schools in his county and the elevation of the character and qualifications of the teachers and officers thereof," and are doing all they can to elevate the character of the profession of teaching and establish a uniform system of education throughout their respective counties.

So far we have endeavored to right existing wrongs, to correct irregularities in work, to introduce improved methods of teaching through the agency of the teacher, and there is no way in which we can acquire so perfect a knowledge of the teacher's work as by visiting the school. In most counties in the State, if we make a reasonable allowance for examinations, for getting to and from districts that need special attention, for irregularity in commencement and ending of school terms, for exceedingly stormy weather, the secretary's visit cannot exceed an average length of more than two hours. How well must the secretary occupy that time! He cannot stop for ceremony, but must transact every part of his business quietly and promptly, without disturbing the usual order of work in the school. If he is a man of business and is anxious for the success of the school, he will not call the teacher to one side and ask where to put his horse, and where he is to get his dinner, and what large boy will care for his horse, but will quietly enter upon the duties of the hour. After carefully blanketing his horse on the windless side of the schoolhouse or in some neighboring shed or barn (for a kind master always cares for his beast), he should enter the school room at once, without any formal knock at the door, leaving his hat and overshoes in the entryway, or, if he directly enters the room, where the pupils generally place their wraps; and, after quietly assuring the young, timid teacher that he has only come to visit the school and would not like in any way to interfere with the regular proceed-

ings of the school, he should take the vacant chair, or vacant seat. He should not occupy the only chair in the room, as there are many classes that the teacher cannot conduct naturally and easily without sitting. His manner while in the school should be quiet, not obtrusive, suggestive at times, occasionally authoritative, but he should by all means learn to let "well enough" alone, and not to deliver the "cut and dried" county superintendent's speech. It may be well to talk to the school at times, especially when we have something to talk about or when we wish to directly influence the school or support the teacher, but let us not seek every opportunity to air our *superior knowledge* and *wisdom* in all the school districts of the county.

His line of observation might be as follows:

1st. The manner of the teacher.

We should notice whether he has an easy, natural method of presenting facts, of drawing out the pupils; at times, a very forcible way of illustrating things.

2d. The personal appearance of the teacher.

It is not necessary for the teacher to be lavish in his expenditure of his scanty earnings for wearing apparel, yet he should remember that he should give a good deal of attention to these matters, that he is an example not only for the pupils but for the whole community. The man who steadily refuses to give any attention to these matters, who is slovenly in his appearance, who invariably enters the schoolroom without a collar, or the woman who is not attractive, clean and wholesome in her personal appearance should never be allowed to remain in the schoolroom.

3d. The manner of the pupils.

We should notice whether the pupils are ready to respond when called upon to recite, whether they rise and stand in an easy, natural, erect position, or whether they are always ready to sit down or fall down, whether there is always a rattle and clatter when they pass to or from their classes or from the schoolroom.

4th. The personal appearance of the pupils.

If the pupils have disheveled locks and unkempt clothing, the teacher is not doing all he can to elevate the character of the school. Many of the pupils come from refined homes, and we should not interrupt or destroy this home training, but we should supplement it by excellent training at school. Many pupils have not refined homes; to them the school should be a place of refining influences. These influences may reach over beyond the school into the home.

5th. The order in the room.

The motto, "Order is heaven's first law," should ever be before us. We should teach order. The successful teacher will see that everything is in its proper place. All objects about the room, all books and papers on the teacher's desk, all books and papers on the pupils' desks should be nicely arranged. If the teacher is the janitor he should do his work thoroughly. When the pupils enter the schoolroom in the morning they should find a pleasant face, nicely swept floor, and thoroughly dusted desks.

6th. The condition of school buildings and school grounds.

Teachers should be instructed to carefully look after school property. The regulations of school boards should be enforced. The apathy of some school districts may be aroused by an enterprising teacher. Pupils and

teacher should be encouraged to keep the grounds in order, to plant hardy trees on Arbor Days. The old schoolroom can be much improved by paint and paper at a trifling cost, and many boards are only waiting for some encouragement when they are ready to do the work.

7th. The moral atmosphere of the school.

Occasionally we find a school that to all outward appearances is running perfectly, but we soon discover an increasing undercurrent of immorality. If the fault lies with the teacher, the remedy should be promptly administered.

The great work of the secretary is to build up an independent county system of schools, to build up a profession of teachers for the county. He has many things to contend with. His corps of teachers is ever changing. The best go first. By watching the marriage license lists in our county papers I find that we lose on an average about twenty-five teachers per year by marriage. Our city schools call upon us for teachers quite frequently. Altogether I think one-third of the corps of teachers is constantly changing. At the opening of the spring terms of school last spring we had nearly fifty teachers with no experience whatever; most of them had no normal training, and quite a number had never attended an institute. This raw material must be prepared for the work. The county institute is a great factor in building up our profession, yet there is much that a county institute or a normal school cannot accomplish. The secretary's visit, either directly or indirectly, must accomplish this work. The secretary should make suggestions, at times should be full of suggestions, yet I am inclined to think that in our first work in visiting schools many of us made too many suggestions, so many, in fact, that the teacher was bewildered and nothing was accomplished. We should hew along one line at a time. First it should be school management, then primary reading, then language work, and so on to the end of the chapter. The successful secretary will ride hobbies, but he will ride but one hobby at a time, and he will not ride that too long. The open circular letter can be used to good advantage, and it will expedite matters so that the work is accomplished in season. Let the secretary issue his circular letter or manifesto calling attention to certain imperfect conditions of school work, or of school management, or of school property, requesting the immediate coöperation of all teachers in bringing about the desired results, and then dodge out on the circuit and see if the letter has made any impression.

Teachers' meetings are the most valuable aids in our work. By the expression, teachers' meetings, I do not refer to the county association where we have the elaborate paper and discussion, but to meetings conducted very much after the plan of the city or village superintendent's meeting of teachers. A series of five or six such meetings should be conducted each spring and fall. For the season the subject or subjects under discussion should be the same. There should be no announcement of the subject nor any formal paper or discussion, but at the beginning of the meeting the secretary should briefly outline the work of the day, and each teacher should be called upon to express his views on the subject. If the teacher does not readily respond he is questioned by the secretary or by other teachers until his views are clearly understood. Finally, the secretary has the closing argument. At the close of the meeting the secretary can have private interviews with many of the teachers. To assist the secretary and

give legal authority to many things that may be done, one of the examining board should meet with him.

An old outline used at such a series of meetings reads as follows:

Uniformity in keeping the roll or register.

Morning exercises.

The arrangement of classes.

The course of study: 1st. What are we to accomplish; 2d. When are we to accomplish it.

Oral physiology and hygiene.

Language work for second and third grades. (Using Metcalf's Language Exercises.)

How to make the schoolroom attractive: 1st. By your presence; 2d. By decorating bare walls and arranging objects about the room.

Care of school property.

Experience teaches me that such an outline covers too much ground. Almost any one of the above headings will furnish work for an entire day.

No system of schools is well organized without a uniform course of study, without some system of reports from the teacher to the manager. It is impossible for the teacher to know what he is to accomplish and when he is to accomplish it, for the secretary to compare one school with another school to learn how thoroughly and rapidly the teacher is advancing the pupils, without a uniform course of study. Reports are tests of the accuracy and faithfulness of the teacher, and if the secretary has a general registry of all the pupils in the county, a comparison of the reports with the grades in the registry will give the secretary a fair knowledge of the advancement of the pupils. Two reports might be made each year, one at the end of the winter term and one at the end of either the spring or fall term. The headings for such report might read as follows:

Name of the County Schools.

Term Report for the Term Ending

District No. Township of

....., Teacher.

Names of Pupils.	Age.	Grade.	Days Present.	Days Absent.	Times Tardy.	Class Stand- ing.	No. Rhetorical Exercises.	Remarks.

The great objection to country school work is that it is subjective instead of objective, that the teacher aims to give a maximum amount of knowledge of books without regard to the mental or moral condition of the pupil. His motive should be higher than this. Let us have character building. Let us educate in the broadest sense. Let us improve the social and moral conditions and relations of our children. As much as we have advanced during the past two years, we believe there is room for a vast amount of improvement all along the line of school work, in supervision as well as in teaching. Let the good work go on. Let us marshal all our forces and combat our common enemies, ignorance, vice and superstition.

UNIFORMITY IN SCHOOL SUPERVISION.

SECRETARY J. N. M'BRIDE, SHIAWASSEE COUNTY.

The framework of our present educational system, as provided for by the laws of the State, assumes that administration can make successful schools, and in some way find or provide well qualified teachers. The administrator of this system finds there is a lack of thoroughly qualified teachers imbued with the spirit of the teacher. The executive school officer or the secretary of the county board of examiners may possess the versatility of a Crichton and the wisdom of a Solomon, yet he finds a condition of affairs that confronts no other executive, *i. e.*, a continuous influx of inexperienced teachers, whose experience must be gained at the expense of results, or, as a manufacturer would put it, diminished or inferior product.

Of those licensed to teach in Michigan for the school year ending September, 1888, 20 per cent were without previous experience. Of the teachers who held certificates in Shiawassee county during the year 1887, but 50 per cent were found teaching in '88, and something less than that number are teaching now of those licensed to teach in '88. I desire to state that these figures are from the official record and are as near correct as can be, although there is an inherent objection to the manner of calculation. To sum up the matter, there is at any time during the school year a large proportion of teachers inexperienced and experimenting. And there is a constant tendency for the inexperienced teacher to supplant the experienced teacher by consenting to receive less remuneration, and a greater activity born of the knowledge that they can teach (and they usually do) that infuses raw material into the ranks of the teaching corps. From an opposite source comes inferior work in the schoolroom. This from the "experienced" teacher, who, for want of a better name, will be styled the "teacher for revenue only," who is usually a man and puts in six hours a day and the remainder of the time devoted to private matters. These teachers are the ones who have had experience, but it is a nominal and non-progressive one. Inexperience, added to an intended non-professional experience, makes up much of the corps that the county executive is to drill into an effective corps of teachers by seeing a few times a year. I have read the reports of the county secretaries from Allegan to Wexford, and find these difficulties mentioned or inferred in almost every report. Now if the county school executive could change all this, in time there would be some hope. The circumstances are thus: if the secretary finds a good school he is primarily not the cause of it.

He is, in many instances, no more than a discoverer, and quite as much of a discoverer as was Columbus. On the other hand, an inferior school is found. It may have been in this condition some time before the secretary finds it, and is very liable to continue for some time after, because the secretary's time is inadequate to complete a reform, and with the secretary out of sight his suggestions are forgotten. From the report of the Commissioner of Education, 1886-87, I quote the following: "No careful supervision can take the place of the teacher. While the superintendent is miles away his genius, his erudition counts for little. Scholarship can no longer be considered the only qualification. There are laws underlying teaching, the application of which are necessary to make a successful school." Again is quoted from the same report: "The learning, genius, skill and personal power of the teacher is really that before which all others pale." In the Moderator of November 1, Mr. Pattengill gleans from Edward Rowland Sill the following: "The kind of a teacher a school has outweighs all other considerations whatever."

"My first school was a failure, or at least I so regard it now," is a very common remark by experienced teachers. I say this condition of affairs is not to the discredit of the teacher but to the system. A mechanic knows something of the nature of the matter he is to transform, but the teacher, intrusted with pupils whose lives he is to mold to a greater or less extent, confessedly knows nothing of the development and workings of mental forces. Under existing circumstances this is and must necessarily be so. A course of instruction in the State Normal School is too expensive, or, in other words, the return received from teaching does not repay the outlay. There is a law in economics that unrestricted competition tends to bring the remuneration of all down to that received by the lowest grade of laborers. This was the basis of the Chinese exclusion act. A normal or collegiate graduate represents \$1,300 or \$2,000 capital, upon which return must be received as interest in addition to wages strictly so called. To expect this amount to be invested in a district school teacher is absurd and a positive discouragement to higher education. At this point it might be said there are many good teachers who have never received pedagogic instruction; these are they who have come up through great tribulations, and their earlier pupils have doubtless gone through more, and many pupils who might have been eminent in civic life have dropped by the wayside of the educational course—but this teacher got his experience. A Wilderness was necessary before Richmond was reached, but an educational Wilderness in order to make one successful teacher is as pleasant to contemplate as Herod's slaughter of the innocents.

This is the view from the educator's standpoint. Suppose we take the view of our present system from the popular and legal side. There is no use of disguising the fact that there is a widespread feeling that the schools of Michigan do not accomplish the results for the great mass of pupils that they ought to produce. Any one can criticise, and there is always more unanimity in criticism than in the proposed remedy. The symptoms of a disease are uniformly the same, but there is a world of difference in the treatment according to the schools of medicine. Men recognize something is wrong and move in some way for a change. The change may not be in the right direction, but there is a consciousness of error that in some way demands righting.

This is obvious from a brief review of Michigan school legislation. Within my memory we have had a county superintendent, then a township superintendent and township examinations, then a county board of examiners with township supervision, and now a secretary of county board of school examiners, with duties of superintendence. In addition to this, one of the proposed legal remedies for school difficulties is the township unit system. With all due respect to those who have advocated the township unit system, it seems to me that this remedy is based on a superficial or at least upon an incomplete analysis of the subject. Inadequate preparation of teachers can never make successful schools, even with the most efficient system of administration. The township unit system is administrative, not preparatory; hence does not deserve consideration at this time. The changes and proposed changes mentioned are the legal forms that criticism has taken. Criticism has taken another form in the so-called summer normal schools. Many of these schools are conducted by men of brass rather than brains, and are run to make money, education being incidental. The very fact that they have come into being and have received patronage is evidence that the State is unable to meet the demands made for education along the particular line of preparing teachers. These schools are denominated normal, and are intended more or less to do what the State does not. The present attitude of the State is, prepare at private schools or don't prepare at all, some form of administration will be found and we can have good schools. School boards in Michigan may be obtuse, but it has become the fashion to lay upon them all the sins of our school system, and numerous are the shafts of malignant wit and silly twaddle aimed at district boards which have been intended to pass for argument in school affairs. The point of the whole matter is here: Given a good teacher and a poor school board, result, good school; inversely, a poor teacher and a good school board, result, poor school. Observation is sufficient to prove this. A legally qualified teacher with a legal contract is quite independent of a school board. In fact the chief complaint against district boards is that the teacher is left to manage the school. The teacher leads, the board follows.

Superintendent Draper, of New York, estimates that 90 per cent. of pupils in that State receive only an elementary education. The mission of the district, as well as all other schools, is to prepare the greatest number for the activities and responsibilities of life, and Superintendent Raab, of Illinois, says the ungraded school demands the most skillful educator. It is pretty generally conceded that the efficiency of schools depends on three factors, named in the order of their importance: (1) Efficiency of teacher, (2) regularity of attendance, (3) length of term, and upon a more complete analysis regularity of attendance depends much upon the genius of the teacher. What shall be said concerning the criticisms and evidences of dissatisfaction, or perhaps it would be better to say the condition of being unsatisfied with our district schools?

If this analysis has been correct I am now ready to propose a remedy. In each county where the population is sufficient, establish a county normal school or attach it to some village or city school. Provide a course of instruction, prepared under State authority, covering a year's time or longer, and the completion of that course would be a license to teach for a term of years, and to be renewed from time to time upon evidence of having been successful, and upon the presentation of a thesis showing continued

knowledge of educational matters. The instructor in this normal school should be selected by a county board of education after having passed a satisfactory examination before the State board, and should have some powers of superintendence when called upon to investigate dissatisfaction in schools for his county. Abolish the office of secretary and board of examiners, and take the money that is paid them and pay the normal instructor. It's a maxim in education that you must bring the schools to the people rather than *vice versa*. I would then abolish teachers' institutes and institute fees. The ordinary one week's institute is the greatest expense for the return received of anything on record. As one who collects these fees, I enter a solemn protest against the teachers coming up each year to be taxed, and some essay reader spend the week in educational junketing and take the whole sum. The longer institutes have accomplished much good is the unanimous verdict, but the criticism upon the institute method of preparation is that attendance is optional, and attention and study is not or can not be made compulsory. There necessarily is that laxity of work in the institute because of its brief *quasi* legal existence that would be absent in the regular normal work. If you have wondered where uniformity of supervision is to appear in this paper, it might be said that uniformity in preparation is a prerequisite. With a uniform course of instruction, with a uniform system of school reports from teacher to normal instructor, and with the visits of the State Superintendent to these schools uniformity in supervision would be approximated.

TRANSACTIONS

OF THE

Michigan State Teachers' Association,

AT THE

THIRTY-NINTH ANNUAL MEETING,

HELD AT

LANSING, MICHIGAN, DECEMBER 25, 26, AND 27, 1889.

STATE TEACHERS' ASSOCIATION.

Officers for 1889.

President.

L. R. FISKE Albion.

Vice-Presidents.

A. E. HAYNES Hillsdale.

J. W. SIMMONS Owosso.

Secretary.

H. M. SLAUSON Coldwater.

Treasurer.

MISS MARY E. TILTON Lansing

Executive Committee.

1886,89:

I. N. DEMMON Ann Arbor.

H. N. FRENCH Kalamazoo.

MISS MARY E. FISH Greenville.

1887-90.

GEO. F. MOSHER Hillsdale.

MISS M. LOUISE JONES Lansing.

AUSTIN GEORGE Ypsilanti.

1888-91.

GEO. F. HUNTING Alma.

J. N. MCCALL Ithaca.

ORR SCHURTZ Charlotte.

Officers for 1890.

President.

J. G. PLOWMAN White Pigeon.

Vice-Presidents.

ALEXANDER HADLOCK Kalamazoo.

C. N. KENDALL Jackson.

Secretary.

D. A. HAMMOND Charlotte.

Treasurer.

W. H. CHEEVER Three Rivers.

Executive Committee.

1887-90.

GEO. F. MOSHER Hillsdale.

MISS M. LOUISE JONES Lansing.

AUSTIN GEORGE Ypsilanti.

1888-91.

GEO. F. HUNTING Alma.

J. N. MCCALL Ithaca.

ORR SCHURTZ Charlotte.

1889-92.

C. B. HALL Detroit.

B. A. HINSDALE Ann Arbor.

MISS ELLA E. HALLOCK Hastings.

MICHIGAN STATE TEACHERS' ASSOCIATION.

MINUTES OF TRANSACTIONS OF THE THIRTY-NINTH ANNUAL MEETING.

Lansing, Wednesday, Dec. 25, 1889.

EVENING SESSION.

Music, Reform School choir.

Prayer, Rev. M. M. Callen.

Chorus, "Banner Song," quintette with accompaniment on bells, Reform School choir.

Address of greeting, Hon. Joseph Estabrook.

Response, Supt. H. N. French, of Kalamazoo.

Selections by Reform School choir, "Ding, Dong, Bell," "Ain't this Same Young Nig no More," "Water Millyun Song."

President's address, L. R. Fiske, Albion College.

THURSDAY MORNING.

Chorus, "Christmas Bells," Reform School choir.

Prayer, Prof. A. E. Haynes, Hillsdale.

Chorus, "Shepherds Abiding," Reform School choir.

The President having stated that Miss Tilton, Treasurer, was absent from the State, on motion of Supt. E. P. Church, Supt. W. H. Cheever was elected Treasurer *pro tem*.

Prest. Fiske stated that the Executive Committee had planned at first to hold the opening session on Thursday evening, but were forced by the refusal of the railroads to grant any special rates to the Association and by the refusal of the hotel proprietors to rent rooms longer than till Friday, to open the session on Christmas evening.

Subject: "What Can the Teacher do to Insure in the Future a Higher Standard of Political Morality?"

Paper 1. Supt. W. C. Hewitt, Union City.

Paper 2. Supt. D. A. Hammond, Charlotte.

Paper 3. Supt. W. J. Cox, Hancock.

General discussion participated in by Gov. Luce, Profs. Haynes, Scott, George, and Supts. Cox, Church, McCall, Hammond and French.

RECESS.

Supt. I. M. Wellington introduced Pres. Irwin Shepard of the State Normal School of Winona, Minn., who, as a representative of the committee of arrangements for the meeting of the National Educational Association to be held at St. Paul in July, 1890, extended a most cordial invitation to the teachers of Michigan to attend.

Remarks were made by Messrs. E. L. Briggs, L. G. Gorton and J. M. B. Sill.

The president announced that Gov. and Mrs. Luce tendered the members of the association an informal reception to be held in the executive parlors from 6:30 to 7:30 Thursday evening.

The invitation was accepted with thanks.

The president appointed the following committees:

Resolutions—Supts. D. Howell, N. A. Richards, J. J. Bronson, H. C. Rankin and Miss Ella Ludwig.

Nominations—Prof. J. W. Ewing, Mrs. C. G. Chaffee, Supt. J. A. Stewart, Prof. C. E. Barr and Miss Edna Havens.

Reception—Supts. C. A. Gower, E. P. Church, J. G. Plowman, J. N. McCall and Prof. A. George.

THURSDAY AFTERNOON.

General Session.

Music, piano solo, "Princess Waltz."

Music, three-part piece, "Slumber Song."

Primary School Section.

Paper, "Primary Reading," Miss Maude Ball, Grand Rapids.

Discussion, Supt. W. D. Clizbe, Mr. Miller and Miss Ball.

Music, vocal solo, "'Tis I," Mrs. Rarrick.

Further discussion of Miss Ball's paper by Supts. D. A. Hammond, C. N. Kendall, Mr. H. R. Pattengill, Pres. Irwin Shepard, Principal J. M. B. Sill, Prof. George, Supts. E. T. Curtis and J. G. Plowman, Mrs. D. E. Wood and Miss N. C. Vandewalker.

RECESS.

Paper, "Form Study in the Primary School," Miss Lillian Crawford, State Normal School.

Discussion, opened by Prof. E. A. Strong and continued by Supts. W. D. Clizbe, W. J. Cox, J. W. Simmons, I. M. Wellington, E. T. Curtis, Miss N. C. Vandewalker and Prof. Miller.

College Section.

Called to order by Pres. Fiske.

Paper, "The Object of a College Education," Prof. A. E. Haynes, Hillsdale College.

At the close of his paper Prof. Haynes was called to the chair.

Paper, "Scope of College Education," Pres. Chas. Scott, Hope College.

Paper, "Limitations of College Studies," Prof. A. Hadlock, Kalamazoo College.

Paper, "Methods of College Work," Pres. H. Q. Butterfield, Olivet College.

In the absence of Pres. Butterfield, his paper was read by Hon. J. Estabrook, Superintendent of Public Instruction.

Prof. D'Ooge not being present, Pres. Angell and Prof. I. N. Demmon, of the State University, spoke briefly on "College Co-education as Seen in the Light of Twenty Years' Experience."

Paper, "College Discipline," Pres. Geo. F. Hunting, Alma College.

THURSDAY EVENING.

Music, double quartette.

Music, male quartette.

Music, vocal solo.

Address, "Character Schooling," Rev. Howard Duffield, D. D., Detroit.

FRIDAY MORNING.

Music, High School choir.

Prayer, Rev. H. S. Jordan.

Music, High School choir.

The President read the following telegrams:

INDIANAPOLIS, IND., Dec. 26, 1889.

L. R. FISKE, *President of Teachers' Association*:

The Indiana State Teachers' Association here send greetings to their brethren of Michigan. May the good cause gloriously prosper in your hands.

J. A. ZELLAR, *Pres't I. S. T. A.*

JACKSONVILLE, FLA., Dec. 26, 1889.

L. R. FISKE, *President Teachers' Association*:

Two teachers in convention assembled send greetings to their four hundred co-workers in association at Lansing.

GEO. P. GLENN,
E. C. THOMPSON.

TOPEKA, KAN., Dec. 26, 1889.

DR. L. R. FISKE, *President S. T. Association*:

Twelve hundred teachers send greetings, and say that saloons were driven from Kansas ten years ago and never returned.

J. N. WILKINSON, *President*.

LAWRENCE, KAN., Dec. 26, 1889.

DR. L. R. FISKE, *President S. T. Association*:

Accept most cordial greetings. I hope for large delegation next summer.

JAS. H. CANFIELD.

On motion of Superintendent E. L. Briggs, it was voted that suitable replies to these greetings be sent by the Secretary, and also greetings to any other associations now known to be in session.

The following replies were sent:

J. N. WILKINSON, *Pres't S. T. A., Topeka, Kansas* :

Five hundred Michigan teachers return greetings. Will fight it out on this line till saloons are blotted from Michigan.

J. A. ZELLAR, *Pres't S. T. A., Indianapolis, Indiana* :

Michigan State Teachers' Association returns greeting. Let us meet at St. Paul in 1890.

G. P. GLENN and E. C. THOMPSON, *Jacksonville, Florida* :

BROTHERS—Michigan is proud of her sons and daughters, both at home and abroad.

PROF. J. H. CANFIELD, *Pres't N. E. A., Lawrence, Kansas* :

Michigan teachers send greeting in return. We hope to go to St. Paul one thousand strong.

Subject—"Is the Topical Method of Studying History the True Method for Public Schools?"

Paper 1. Yes. Julia A. King, State Normal School; read by Annah M. Soule, State Normal School.

Paper 2. No. F. R. Hathaway, Raisin Valley Seminary.

General discussion, Prof. A. E. Haynes, Supts. E. M. Russell, J. N. McCall, R. H. Gulley and Pres. Scott.

RECESS.

Paper, "The Character of School Libraries and How to Use Them," Supt. I. M. Wellington, Muskegon.

Discussion, Supt. E. M. Russell, Battle Creek.

FRIDAY AFTERNOON.

Senate Chamber.

Music, vocal solo.

Paper, "The Expenditure of the Educational Dollar," Supt. E. T. Curtis, Calumet.

Discussion, Supt. W. C. Hall, Albion, followed by Messrs. Miller, Graves and Sinclair, Supts. H. N. French, D. A. Hammond and Dr. P. P. Field.

Music, vocal solo, Mr. Piggott.

Report of committee on transportation.

Supt. Hammond offered the following:

Resolved, That it is the sense of this Association that its next meeting be held in Grand Rapids, provided suitable accommodations can be secured without expense to the association.

Supported by E. M. Russell.

After warm debate, it was moved to amend so that the *Executive Committee should be instructed* to arrange to hold the next meeting in Grand

Rapids if suitable arrangements for accommodation could be made without cost to the Association.

After further debate, Supt. Howell moved to lay the matter on the table, which motion was lost.

A vote on the amendment resulted 38 for and 8 against. The original motion, as amended, was then adopted.

It was moved to request the president to call the Executive Committee together during the second week in September.

After some discussion, it was moved to substitute "at the time of meeting of the city superintendents" for "the second week in September," which amendment prevailed, and the motion, as amended, was then adopted.

The Committee on Resolutions reported, and the following resolutions were adopted:

1. *Resolved*, That this Association appreciates the efforts of the President and officers of the Association in preparing so instructive a programme as has been presented in all the departments.

2. *Resolved*, That we recognize with great appreciation the kind courtesy of Governor and Mrs. Luce in so kindly greeting the members of the Association.

3. *Resolved*, That we extend our thanks to the Board of Control of the State building for the use of the halls for our various meetings.

4. *Resolved*, That the sincere thanks of the Association be tendered to Mrs. Barrick and to the young people of Lansing, and especially to the boys from the State Reform School, for the excellent music furnished during the sessions of the Association.

5. *Resolved*, That this Association believes the adoption of the Township Unit System for our rural schools would be of great benefit to the same, and would respectfully call the attention of our law-makers to the great advantages of the system as shown in a dozen or more of our sister States.

DAVID HOWELL,
N. A. RICHARDS,
J. J. BRONSON,
H. C. RANKIN,
MISS ELLA LUDWIG,
Committee.

On motion the Association proceeded to the election of a President.

Supt. E. P. Church nominated Supt. J. G. Plowman, which nomination was supported by Principal L. G. Gorton.

On motion the Secretary was instructed to cast the ballot of the Association for Supt. J. G. Plowman as President, which was done "unanimously."

The Committee on Nominations presented the following report, which was accepted and adopted:

First Vice-President—Prof. Alexander Hadlock, Kalamazoo.

Second Vice-President—Supt. C. N. Kendall, Jackson.

Secretary—Supt. D. A. Hammond, Charlotte.

Treasurer—Supt. W. H. Cheever, Three Rivers.

Executive Committee, 1889-92—C. B. Hall, Detroit; Prof. B. A. Hinsdale, Ann Arbor; Miss Ella E. Hallock, Hastings.

J. W. EWING,
MRS. C. G. CHAFFEE,
J. A. STEWART,
C. E. BARR,
MISS EDNA HAVENS,
Committee.

Supt. Cheever, Treasurer *pro tem.*, presented the following report, which was accepted and adopted:

REPORT OF THE TREASURER OF THE MICHIGAN STATE TEACHERS' ASSOCIATION, 1889.

Receipts.

Received from Miss Mary E. Tilton.....	\$184 53	
Amount received from State Reading Circle.....	88 05	
Annual dues.....	145 50	
Total.....		\$318 08

Payments.

Expenses Executive Committee.....	\$14 75	
Potage, telegrams, circulars.....	13 99	
Announcements and postage.....	11 50	
Programmes.....	5 00	
Dr. Howard Duffield.....	20 00	
Secretary Slauson, postage, telegrams.....	3 98	
Mrs. Rarrick, music.....	25 00	
Total.....		98 17
Balance on hand.....		\$224 91

W. H. CHEEVER,
Treasurer, pro tem.

On motion of Supt. Howell, the Secretary was instructed to have a sufficient number of copies of the minutes of proceedings printed to furnish officers with five copies and members with two copies each.

President Fiske thanked the Association for the kindly support that they had given him in the discharge of his duties, and called for the President-elect. He being absent the Association adjourned.

H. M. SLAUSON,
Secretary.

L. R. FISKE,
President.

LIST OF MEMBERS, 1889.

Names.	Residence.	Names.	Residence.
Allen, Estella.....	Capac.	Dean, A. S.....	Grand Ledge.
Allen, Jessie.....	Charlotte.	Deering, Harriet A.....	Hillsdale.
Angell, James B.....	Ann Arbor.	Demmon, I. N.....	Ann Arbor.
Arbury, F. W.....	Houghton.	Doxsie, George A.....	Grand Ledge.
Avann, R. S.....	Albion.	Durfee, Stephen.....	Hartland.
Baker, N. J.....	Carson City.	Ellis, George.....	Olivet.
Ball, Maud.....	Grand Rapids.	Ewing, J. W.....	Alma.
Ballou, J. M.....	Otsego.	Fawkes, M. G.....	Parma.
Barney, Blanche.....	Au Sable.	Finch, T.....	Rives Junction.
Barney, G. M.....	Carson City.	Freeland, Sarah B.....	Caledonia.
Barnhardt, I. N.....	Grand Rapids.	French, H. N.....	Kalamazoo.
Barr, Chas. E.....	Albion.	Gee, E. F.....	Wayne.
Bates, Angie.....	Champion.	George, Austin.....	Ypsilanti.
Bates, A. S.....	Gobleville.	Gibson, L. J.....	Niles.
Beal, W. J.....	Lansing.	Gilroy, Mary.....	Lansing.
Bennett, B.....	West Branch.	Griffith, Emma.....	Lansing.
Bennett, Mrs.....	West Branch.	Goodfellow, A.....	South Lyon.
Bird, C. E.....	Leslie.	Gotts, Edith.....	Muskegon.
Blumberg, Mrs. M.....	Grand Ledge.	Gould, Mrs. L. E.....	Owosso.
Brandt, G. R.....	Chicago.	Gower, C. A.....	Lansing.
Briggs, E. L.....	Grand Haven.	Gulley, R. H.....	Mason.
Briggs, R. D.....	Grand Ledge.	Hall, C. B.....	Detroit.
Bronson, J. J.....	St. Joseph.	Hallock, Ella.....	Hastings.
Burke, Nellie.....	Richmond.	Hammond, D. A.....	Charlotte.
Burleson, A. H.....	Richland.	Hancome, G. E.....	Gaylord.
Burnette, C. A.....	Bancroft.	Harris, J. M.....	Boyne City.
Burrell, A. C.....	Carson City.	Hartwell, M. R.....	West Bay City.
Burrows, A. E.....	Alma.	Harvey, G. W.....	Webberville.
Burrows, A. W.....	Chesaning.	Hathaway, F. R.....	Adrian.
Carmody, Bessie L.....	Henderson.	Havens, Edna.....	Three Rivers.
Carson, O. H.....	Lansing.	Hawkes, N. H.....	Birmingham.
Carton, Lena.....	Bay City.	Haynes, A. E.....	Hillsdale.
Catton, Geo. R.....	Kalkaska.	Hewitt, W. C.....	Union City.
Chaffee, Mrs. C. G.....	Flint.	Herrig, Bella W.....	Saginaw.
Chatfield, L. O.....	Benton Harbor.	Hickey, A. D.....	Lansing.
Cheever, W. H.....	Three Rivers.	Hicks, Carrie.....	Laingsburg.
Church, E. P.....	Cadillac.	Hitchcock, Rufus.....	Davis.
Clute, O.....	Agr'l College.	Howell, David.....	Lansing.
Conkling, N. E.....	Galesburg.	Hull, W. C.....	Albion.
Conn, Lulu M.....	Lansing.	Hume, M. A.....	Lansing.
Cook, Albert P.....	Milford.	Hunting, G. F.....	Alma.
Cox, W. J.....	Hancock.	Hutton, Rose M.....	Windsor, Ont.
Cox, Mrs. W. J.....	Hancock.	Johnson, S.....	Lansing.
Cranfor, Jno.....	Coral.	Jones, M. Louise.....	Lansing.
Crawford, Lillian.....	Ypsilanti.	Kennedy, J. W.....	Dundee.
Cuddeback, Elnora.....	Alma.	Kent, Florence.....	Lansing.
Cupples, J. W.....	Spring Lake.	King, H. M.....	Lansing.
Curtis, E. T.....	Calumet.	Laird, S. B.....	East Tawas.

LIST OF MEMBERS.—Continued.

Names.	Residence.	Names.	Residence.
Lamb, Ida A.....	Washington.	Sage, Mrs. W. V.....	Hartford.
Lamphier, E. A.....	Martin.	Scott, Chas.....	Holland.
Larzelere, C. S.....	Lowell.	Seelye, O. C.....	Marshall.
Lennon, Anna.....	St. Ignace.	Shaffer, Mary.....	Lansing.
Lewis, W. F.....	Martin.	Sheldon, H.....	Bancroft.
Lillie, C. C.....	Coopersville.	Shepherd, Louise M.....	Vassar.
Loughnane, Emma.....	Lapeer.	Shipman, Julia.....	Grand Ledge.
Mapes, S. W.....	Climax.	Shisleer, Clara.....	Caledonia.
Marhoff, A. L.....	Galesburg.	Schurtz, Orr.....	Charlotte.
Mayhew, Ira.....	Detroit.	Sill, J. M. B.....	Ypsilanti.
McCall, J. N.....	Ithaca.	Simons, Helen.....	Bay City.
McCloskey, J. E.....	Sheridan.	Sinclair, James.....	Belleville.
McDonald, R. G.....	Stockbridge.	Slauson, H. M.....	Coldwater.
McElheney, Bertha.....	Bangor.	Smith, Cyrus.....	Indianapolis.
McGee, Z. F.....	South Frankfort	Smith, C. E.....	Schoolcraft.
McGee, Mrs. Z. F.....	South Frankfort	Smith, E. Azalia.....	Detroit.
McKenzie, D.....	Flint.	Smith, F. C.....	Gladwin.
McKinney, Chas.....	Olivet.	Smith, E. B.....	Laingsburg.
McKone, W. J.....	Morrice.	Snyder, Edith E.....	Charlotte.
McLean, C. M.....	Whitehall.	Soule, Annah May.....	Ypsilanti.
McPhillips, Julia.....	Saginaw.	Stephens, Nina M.....	Oscoda.
Mead, J. W.....	Midland.	Stewart, Jno. A.....	Port Huron.
Miller, J. R.....	Dowagiac.	Strong, E. A.....	Ypsilanti.
Monroe, Susie.....	Port Huron.	Stroup, F. E.....	Tawas City.
Morse, W. A.....	Au Sable.	Sullivan, Julia.....	Lapeer.
Munson, W. H.....	Burr Oak.	Sunderland, B.....	Clio.
Newton, Ella.....	Lapeer.	Tate, Rachel.....	Berrien Springs.
Norton, S. W.....	Hillsdale.	Taylor, Ella.....	Grand Ledge.
Ostrander, Lewis M.....	Scottville.	Taylor, F. M.....	Albion.
Parker, E. J.....	Onkama.	Thomas, Emma A.....	Detroit.
Pattengill, H. R.....	Lansing.	Thompson, Jos. A.....	Corunna.
Perkins, Belle.....	Stanwood.	Treat, Alice.....	West Windsor.
Phares, Mrs. M. L.....	Grand Ledge.	Tyler, Leon L.....	Bannister.
Pierce, S. E.....	Waukegan, Ill.	Vandewalker, Nina.....	Ypsilanti.
Plowman, J. G.....	White Pigeon.	Wagner, J. L.....	Grand Ledge.
Plunkett, E. M.....	Ovid.	Watkins, E. D.....	Flushing.
Putnam, D.....	Ypsilanti.	Wellington, I. M.....	Muskegon.
Rankin, H. C.....	Lapeer.	Whitmore, Dolly.....	Lansing.
Rankin, W. P.....	Rochester.	Wilson, D. F.....	Napoleon.
Richards, N. A.....	Greenville.	Wilson, Jennie.....	Atlas.
Roberts, J. W.....	Hastings.	Wilson, Mary E.....	Flint.
Russell, E. M.....	Battle Creek.	Wood, Mrs. D. E.....	Chicago.
Russell, Mrs. E. M.....	Battle Creek.	Woodford, R.....	Lansing.
Sage, W. V.....	Hartford.	Yntema, D. B.....	St. Johns.

ADDRESS OF WELCOME.

BY HON. JOSEPH ESTABROOK, SUPERINTENDENT OF PUBLIC INSTRUCTION.

Mr. President and Teachers of Michigan:

'This honor is bestowed upon me not because of any special merit of my own; another man had been appointed to this very pleasant task of welcoming the teachers to Lansing, and it may be a little embarrassing to the gentleman who shall give the response, to meet me here instead of the Mayor. But I can assure you that you are most cordially and warmly welcomed to this place, to this anniversary—the thirty-ninth of the Teachers' Association of Michigan.

We welcome you most cordially to our hearts. And I do this especially because I look into the faces here of many that I have met in other days, some whose heads have grown gray in the service, whom I have known for many years to have been toiling in the broad field.

We are glad to welcome you from all portions of the State. I see some here from the southeast; I meet another from the extreme northwest; from the Upper Peninsula they have found their way to this place where the teachers meet with joy. I am glad to welcome those who come from the rural districts, for I see some who have come from the ungraded schools (not so much ungraded as formerly), from the village schools, from the city schools, from the University of Michigan, from the State schools, and from all the incorporated institutions of the State of Michigan that constitute our grand school system. We welcome you here. We are engaged in the same work, are bound together by common ties. We are engaged in the great work of building up character, developing manhood and womanhood, of preparing the children of the present generation for the generation that is to follow us.

We welcome you here. We welcome you as members of a profession as useful, at least, as any. We welcome you here as engaged in a service as joyful as any in which a human being ever engaged. I look in your faces tonight with great satisfaction, as those who are toiling in fields that will bring forth rich and golden harvests in the age to come. This, we trust, will be a profitable season, and that we will go to our work with higher ideas, new inspiration and greater joy. We have made some sacrifice in coming from home on this day, and I am glad to see so large a number present.

In behalf of the citizens of Lansing, in behalf of all those who are interested in the work here, we bid you a most cordial and hearty welcome.

RESPONSE.

SUPT. H. N. FRENCH, KALAMAZOO.

SUPT. ESTABROOK—I am placed in an embarrassing situation, in that having been chosen to respond to the anticipated words of one man, I am suddenly called to extemporize in large part, to fitly answer the words of another. I therefore solicit your charity.

The president of this body has called me not only to the performance of a most agreeable duty, but he has also accorded to me a very pleasant privilege.

Permit me, therefore, sir, in behalf of the officers of this Association, on the part also of its Executive Committee, and as a representative of its membership in general, to thank you most gratefully for your generous words, and for your hearty welcome.

To the innumerable kindly deeds and friendly offices of the citizens of Lansing, always and cordially extended to the Association, and to its kindred branches of educational endeavor and conference, it affords us heart-felt pleasure to bear not only swift, but willing, earnest, grateful witness.

The welcome of this city, sir, has for many years shown itself to us in countless other ways than words, and I believe I voice the unanimous expression of this fraternity of teachers in saying that to no other meeting point than this would we willingly consent to have this annual convention called.

And, indeed, it is most fitting for other reasons than the certainty of a generous welcome and a cordial hospitality, that we come hither. This is the Capital city; the head in a peculiar and special sense; the center of affairs; the State in epitome. Where more fittingly than in this hall and chamber of the immediate representatives and law-makers of the people ought such an assembly as this to be held? Nowhere.

The public schools and colleges of varying rank, but all having a common ultimate aim and end, have made both possible and promiscuous these things, which we do here see and know and enjoy.

And in reciprocal and compensating turn, all the influences, legislative, judicial or executive, forth-flowing from this central source, have carefully fostered and jealously guarded the educational interests of our State, and have made the school and the schoolmaster possible, not only as to existence, but in respect to efficiency, widely and nobly potential.

The object of this meeting, sir, is too well understood to need any special comment or extended explanation. Its name is sufficiently indicative of its fraternal character and significance. The thoughts and the discussions which an earnest consideration of the programme before us will, I doubt not, call forth, must, it seems to me, appeal to and interest us all, no matter what or where our field of work, for, whether we adequately appreciate it or not, they have to do in most intimate sense with what is of the highest import—the common good.

I trust we shall go forth from this point of “meeting of the ways,” at which we have been so kindly welcomed, with fresh inspiration and a better courage; with renewed hope, and a more ardent sympathy with each other as fellow-laborers in a common cause.

With this very imperfect expression of our recognition of your courtesy, let me again thank you for your words of cheer.

PRESIDENT'S ADDRESS.

THE INTELLECTUAL TENDENCIES OF THE DAY, AND THE RELATIONS OF THE TEACHER THERETO.

PRESIDENT L. R. FISKE, ALBION COLLEGE.

It is a maxim often quoted that history repeats itself. This statement is true only in the most general sense. There may be a recurrence of similar events on the theatre of human activity, but no two ages are alike.

If the causes—that is, social forces, educational movements, military operations—are identical, the outcome will be the same; but the soil out of which comes forth the civilization of an age always possesses many elements peculiar to itself. During the short period of my public life even, everything has undergone a change. The arts have been transformed, the physical sciences have given up dogmas, or taken up new ones, or by accretion have swollen to much larger proportions. Social science has come to busy itself with problems unthought of forty years ago. Civil codes and international codes have a new reading, so that this century is closing with a life largely unknown when the first half was rounded out.

That the scholarship of the present age shows a wide departure from the intellectual movements of every period of the past is apparent to all observers. Physical science is coming into prominence as never before. During my college days but little attention was given to the study of nature. Chemistry, Botany, Zoölogy, Astronomy occupied a very subordinate place in the curriculum, and Biology as a distinct science was really unknown. Now all of this has greatly changed. The working laboratory is occupied, not only by the specialists, but by every student in college. The test tube, the beaker, the blowpipe is in everybody's hands. An institution of learning might as well be without recitation rooms, or libraries, as without microscopes. Fifty years ago the ancient languages looked scornfully down on the natural sciences; today the physical sciences in many of our best schools of higher learning occupy a place not in the least secondary to linguistic studies. This I am neither commending nor condemning, simply stating as a fact. That which is true of the schools is true also outside of college

halls. The intelligent public are turning their gaze upon the physical world as an object of scientific scrutiny, traversing this domain for scholarship, and to obtain mental culture. The natural sciences now come to the front filling a large part of the intellectual horizon of the learned world. This is a marked tendency of the present age. There is a decidedly physical drift in the direction of thought. Were we to drop this subject right here our view of the field would be very incomplete.

Science is defined as the coördination of facts, facts known according to the order or relations in which they exist. Again, science is systematized knowledge, the system to which the facts belong, the system under which contingent realities are arranged. Or in another form. Science is knowledge reduced to fundamental ideas and principles, that is the translucence of the general in the particular, the particular seen and considered as existing in the general. In all knowledge there is a relational element and bond. Simple apprehension is not knowledge; it is but the raw material of knowledge. It must be put into definite relations before it has any scientific value or can be designated as knowledge. All these definitions proceed upon the unquestioned truth that there is no reality outside of system. There is no isolated reality in the universe.

The content of science has been greatly extended within the last thirty or forty years. It is now made to be less empirical and more rational than formerly. That is, the dividing line between science and philosophy has largely disappeared, or if it exists the territory of science has been relatively broadened, and of philosophy in distinction from science correspondingly lessened. Formerly science busied itself with relations as they exist without inquiring into the source or genesis of such relations. It was the *what*, not the *how*. It is now affirmed that you do not know the *what* unless you know the *how*. The *how* is a part of the *what*. In other words we must embrace in our system of science, under the headlines of science, the modes by which existing systems have come to be.

It is certainly true that the content of the *what* and the *how* is more comprehensive than of the *what* alone. We surely know more of anything by understanding the mode of its existence, the genesis of its being, how it has come into a system than merely its place in a system. This leads us to give causality a place in science. Aristotle makes a threefold classification of cause—final cause, the end for which; formal cause, the ideal or plan according to which; and efficient cause, the power or efficiency by which a thing is produced. That is cause which contains the sufficient reason why a thing exists, which is an adequate explanation of its existence.

Scientists do not hesitate to put formal cause into science; indeed, with them formal cause is nearly the whole of science, although they are disposed to exclude from science all inquiry into the intelligence that conceived the plan, that ordained the mold into which science is cast. Now if a plan is made there must be a rational purpose; that is, there must be a reason for making it at all, and for making it as it is. Science is complete only when final cause is united with formal cause; when the *reason* of a thing is conceived in connection with its mode of being or action. In the study of the products of human art we would say our work was only half done if confined simply to a survey of the relations and internal movements of the wheels of a machine; we insist on carrying the investigation to the point of determining the purpose for which the machine was invented. We go back to final

cause, which is nearly always expressed in the name we apply to any such work of art. It is a dwelling house, a locomotive, a sewing machine, a thresher, etc. Should not the same principle prevail in reading nature? Knowledge is adequate only as it is philosophical, objects of sense, of consciousness and of the understanding resting back upon ultimate truth. To seek less than this is to stop half way in solving the problems of creation.

Scientists not only study minutely the units of complex systems of truth, but the relations of these systematic units to each other, their dependence the one on the other. They put them together in the harmony of broader units. Not only is the mineral kingdom studied as a distinct kingdom, the vegetable kingdom as a distinct kingdom, the animal as a distinct kingdom, but the dependence of the vegetable on the mineral kingdom and the dependence of the animal on the vegetable kingdom. The three, though possessing distinct boundaries, so that each excludes the other, are yet linked together, supporting one another and dependent on one another. The content of the word nature takes them all in as a broad unit. But all of this belongs to formal or ideal cause.

But can any one give a reason for stopping here in his study of truth? The reason of the mineral kingdom cannot be found until we look at the vegetable, and the reason for the vegetable is a mystery until we turn to the animal. He would be regarded unworthy the name of a scientist who should claim that in the pursuit of science we should stop at the boundaries of either one of these systems, taking no account of anything outside of it. Just so far as there are further relations science seeks to trace them out.

But are there no relations between formal cause and final cause, between plan and purpose? Can any one in studying nature, this great system of finite being, existing as a complete and wondrously complex unit, find a reason for it, conceive of its coming to be without resting it on an Infinite will acting with Infinite intelligence? Must not everything that is finite, and which therefore must have been produced, have had a producer? Is not the certainty of the unconditioned as absolute as the certainty of the conditioned? Could the latter be without the former? And if the integrity of truth compels us to look for the cause of the lesser unit, must it not compel us to look for the cause of the greater unit, of the broad unit of all created things?

I am reminded just at this point that a supposed law has been injected into the domain of science which, if it be a real law, and we concede its probable existence, has received various and diverse readings. I now speak of evolution. I call it a supposed law, for, in a broad sense, surely it has not been demonstrated to exist. It is not my purpose, or any necessary part of this discussion, either to accept or reject it. With certain qualifications it is not unscientific. The most that can be said for it is it has not been disproven; and the most that can be said against it is that it has not been proven. Some principles, however, exist to limit its range. These limitations established, the lover of truth may rest in peace with no fear for results.

But I may say that it is not strange that the scientist should incline to the adoption of some theory of evolution. Science is suspicious of breaks, contemporarily all things are related. There are at least some links binding all contemporary objects into a contemporaneous unit. Why may it not be true, then, that there is a chronological unit? That along certain lines there is chronological unity is indisputable. The same portion of mat-

ter may exist successively in a gaseous, liquid, and solid state. There is no scientific fact in the way of the assumption that the entire universe was once nebulous. The greater part became in time liquid, and it is today largely in a solid state. These changes are steps in evolution. That other evolutionary movements also have taken place is indisputable. But that the entire series of successive changes in nature comprise a chain in which the first link has developed into the second, and the second into the third, and thus on, successfully bringing all forms into a single genetic series, is a theory still under dispute. The most radical form of evolution starts it in the molecule without anything generating the molecule, and that out of this all things have come. The second or modified form of the theory is that infinite power created the molecules and that evolution has done all the rest.

The third or most restricted hypothesis is that there was a special divine act at creation, another when vegetable life appeared, another for the production of animal life, and another still when rational intelligence, the human spirit, made its appearance.

The theory that the entire genetic energy existed in atoms or molecules, no subsequent energy injected into nature, has a bad break in the scientific abandonment of spontaneous generation. If life exists only as the product of life, its first appearance on the earth could not have come from the earth, but from an energy foreign to nature—hence, a divine act. Hold if you will to the development of all animal life, including man with reason, conscience, will—a moral being—yet in evolution we find no condition for the first introduction of life. Philosophically this must be maintained, with less than this there is no philosophy; whatever it be, the energy by which evolution proceeds must have existed when evolution began. There cannot be an effect without a cause, and the effect cannot be greater than the cause. If primary molecules of matter do work out the multiplex forms of nature they must originally have contained in themselves all the energy thus displayed. This statement is self evident. A further statement is also self evidently true, that if the molecules contained this energy it must have been imparted to them. All that is evolved must first have been involved. To explain the universe by starting the inquiry with the nature of the tendency called evolution, beginning with the molecules already charged with their energies or forces, is irrationally starting with a product. The fundamental fact is left untouched. Whence these molecules charged with such forces? With a loaded gun you look both ways, backward for the loading and forward for the discharge. Without both your philosophy is lame. In nature before the conditioned there must be the unconditioned. Underneath the conditioned, as the support of the conditioned, as the reason for and explanation of the conditioned, there must be the unconditioned. No theory that banishes God from nature can account for nature or enable us to conceive of the possibility of its coming into being. To assume the eternity of matter is to make that infinite which is finite. Metaphysically a finite universe without being created is unthinkable. The unconditioned is a first principle, to deny which is a mental absurdity if there be the conditioned. In other words, if there be such a thing as nature, extend it however far you will, still having bounds, there must be a God. Unless admitted the fact of the universe defies solution. The great postulate of all science is God. If it does not build here it cannot build at all.

That there should have been more than ten thousand specific acts in giving existence to the more than ten thousand distinct species in the kingdom of life is not absurd. If science finally reaches this as the only rational theory of the vegetable and animal kingdoms, the foundation, an infinitely intelligent will, is broad enough to hold all we place upon it. If, however, it becomes necessary to maintain that there has been a process of evolution embracing all forms of being on the earth in one or more series genetically arranged, still is there a God, implanting in nature in the far off ages of the past the forces under definite laws through which these products have made their appearance. Indeed, instead of evolution crowding God out of nature, does it not show in a most striking way the astounding resources of His being in that at the beginning He could and did implant in nature such an array of forces and such far reaching laws as to compass the generation of a universe such as this has come to be?

If the question as to the validity of the principle of evolution can be settled, a most important gain will be made. That evolution to the extent of generation of what are called species is not an unquestioned or proven fact of science everybody must admit. Yet the theory is exceedingly attractive, it makes a persuasive bid for our faith, but it would be rash to affirm that it has been taken out of the realm of speculation. It may be true, but it has not been demonstrated. And though the majority of scientists adopt it, the question is not settled, for the tenure of science is not subject to the dicta of majorities. Science gives proof of its reality wholly outside of the votes cast for it.

I have said that science reduces the multiple to a unit, and any fact otherwise isolated is understood when known in its companionship in the unit. But it will be noticed that unity is one thing and homogeneity quite another. And it is not quite certain that agreement in diversity, which gives us unity, affords any ground for a theory of genetic oneness. That the numberless diverse forms of which nature is composed are linked together in a system from interdependence gives no reason to believe or disbelieve in genetic succession. The two problems have different factors, and sustain to each other no necessary relations. If God by one simple act of creative power produced a universe of dissimilar parts, there was a oneness growing out of a common origin, He, Himself, the center of it all; and a oneness of plan or system of it all, the former a necessity, the latter a certainty to make it intelligible to us and all his rational creatures, and doubtless to meet the demand of His own infinite harmonious life. But that He should put all nature in genetic bonds does not follow, so far as we can understand the problem of being. The former is unity. The latter is homogeneity. We leave this question just here, saying that God's thoughts are not yet fully fathomed by our finite powers.

It is unquestionably true that the intellectual life of the present time leads more naturally than the intellectual life of the past to business pursuits. Up to a recent time everything in college pointed toward the professions. The student entered college because he expected to take up one of the professions, and the character of the curriculum—from the predominance of linguistic studies, and the almost entire absence of branches which had a bearing on any of the ordinary lines of business—brought the young man almost to the door through which he could step at once into the law or the ministry. But a very extensive change has been made. Business has

to do with nature, whether it is farming, manufacturing, mechanic arts, engineering, railroading, or any one of multitudes of other occupations. In all of these avocations scientific principles are employed, and everything depends on the fullest and most economical utilization of the laws of nature. The study of chemistry, as now taught in our best colleges, throws a student into the very heart of nature; he does not simply listen to the instruction of the teacher, he handles everything with his own hands, he himself puts every question, he tests every theory, forms a personal acquaintance with the myriads of forces there at work. He is already a manufacturer, and his predilections guide him to some department of business where his knowledge and tastes find congenial employment to advance intelligently the industries of the world.

Thus it is with the revelations of the microscope in the vegetable and animal kingdoms, putting us in possession of knowledge which prepares for exceedingly profitable lines of industry relating both to the health of the body and the augmentation of the capital of the world. Without further illustration I proceed to say that the time is fast passing by in which the professions will be called learned in distinction from many business callings. The agricultural college is cultivating a field of scholarship in which learning plays as large a part as it does in a law school.

In the numberless lines of manufacturing scientific principles are intelligently employed. All labor is the introduction of means to utilize the forces of nature. The greatest of problems is not how to sway an audience through the power of oratory, not how to legislate for the government of man or judicially secure the execution of human laws, but how to get out of this physical universe for our well being the myriads of forces crowded therein. From the simple grain of sand or particle of clay out through the vast mass of this earth everywhere there are hidden stores of good for us. It is only a step from the sand bank to the wonderful plate-glass, and the base of the clay is aluminum which promises to take the first place among the metals in the industrial arts. Nature is a magazine of energies and laws ready for our use, but we must intelligently take possession of these resources which wait for our word of command. The physical world is more than a library, for the half, indeed the hundredth part, has not been told. It is more than a museum, for its richest treasures have not yet been mined. The known good is only the alphabet of the great volume of truth which was intended to have a bearing on our practical life. The utility to the world of electricity alone is great enough to pay for all the labor bestowed by the scientific investigator.

It is thus apparent that the scholarship of the day is leading us into fields of industry in which man employs both head and hands. Nature hereafter is to be a workshop, where man will find his noblest and most scholarly employment. Such is the tendency of the intellectual life of the day. Schools of all grades point in this direction; the press is fostering this tendency; the very atmosphere at the close of the nineteenth century is full of the spirit of industrial science. It seems to me that this is as it should be. Into business more of science and scholarship should be injected, all labor should be learned. For this man has been supplied with adequate mental powers, and he should not part company with thought through the labor of the hands. I believe it to be one of the great missions

of our schools to make the world of industry an intellectual arena where the best thoughts are born in the mind.

In the transition from the literary type of scholarship to the scientific of which I have spoken, the careful observer cannot fail to note a mental trend towards materialism. That an exclusive devotion to physical truth, as the result of the absence of thought on themes which are not physical, should practically make the material fundamental in knowledge, might naturally be anticipated. With not a few of the leading scientists we find this drift. The drift is the result of the limited or partial field of truth under survey. The spiritual is lost sight of from the fact that the physical wholly engrosses the mind. There is so much to do in the domain of science no time is left for anything else. Coördination of facts is so large an undertaking that it alone is attempted, and the habit of discarding other forms of truth grows into a conviction that no other forms exist. The scientific structures are so complete, the systems as determined round out into such beautiful and absolute harmony, nothing further is looked for. In the acceptance of the units we call systems the scientific spirit is satisfied, and the domain of fundamental philosophy is not traversed or even conceived as necessary. Now the evidences of the reality of truth in the material world and the immaterial are quite unlike. The man who is wholly a physicist fails to appreciate the nature of truth in any department but the physical, and often with a great show of ignorance demands that both be put in the same domain; but as the immaterial cannot be determined by the material tests, it is assumed there is no world of immaterial substance. It must be borne in mind that the partial is often no less misleading than that which is dogmatically false, and as the outcome there is not unfrequently an absolute denial of truth. When the world of the conditioned has been more fully explored, and the scientist shall be more strictly a philosopher, when the limitations of science shall become more distinctly marked, the pendulum which in its swinging has lodged within the crowded folds of matter will swing back again, and by the equal balancing of the material and immaterial forces an equilibrium will be restored. Half-truths lead into error, making even an age or a century one-sided. Whole truths are the only correctives of such pernicious tendencies.

There has for some years been a growing tendency towards the secularization of knowledge. The demand that the Bible be excluded from the public schools is an illustration of this tendency. This demand is due only in part to the fact that portions of the American public do not accept the Bible as a divine revelation, or the Protestant translation as reliable, and hence claim that they should not be taxed in the interest of that which they do not approve. This point, of course, is a strong one. But quite independent of this there is a disposition to separate scholarship from religion. While the prevailing creed in science, we are glad to know, is not materialism, even Professor Tyndall in his Belfast lecture telling us that in his better moments he conceived of something beyond and underneath nature; yet in the thought of many men of wide scholarship the whole subject is treated as though there were two distinct domains of truth, not interlocked, but each practically occupying its own field by itself. Thus two spheres of truth, not two hemispheres. Hence secular education is the motto. It belongs to the church to foster religion, it is said, not to us in the teacher's profession.

Just a few moments on our relations as teachers to the intellectual tendencies of the day.

The teacher cannot be largely an investigator. His hours are too full of the drudgery of work, he is too absorbingly occupied with the duties of imparting instruction on the ordinary plane of scholarship to find time to push out into the fields of the unknown. This is true in our public schools, and to a great extent is it true with college teachers.

Successful investigation requires leisure from exacting demands of professional life. But the seeds of our civilization germinate in the schools. It is here civilization begins, and the character of that civilization grows out of the character of the seed sown and the soil into which it is cast. And there is no other contact of mind with mind more direct and in which there is more potency of influence than is supplied by the relation of the teacher to the pupils under his charge. The teacher can, he ought, and largely does reproduce his life in the soul of the pupil. We hold the intellectual destinies of the rising generation in our hands. We make the intellectual tendencies of the day. We give the early impulse to the same, which impulse will never wholly die out. It is due to you that that boy starts for the higher realm of scholarship. It is your spirit that is making him a profound mathematician, or an enthusiastic scientist, or a master in the delightful fields of literature. The teacher gives direction and inspiration to the intellectual forces of the age just at that point in life in which the most determinative results are achieved. The mighty men in the highest spheres of learning caught the impulse of scholarship from you. You started these men and women, who are becoming eminent, on the way to eminence.

A more potential calling than that of the teacher is nowhere to be found. The glory which rests on the brow of the great leaders of thought you put there; you started the evolution of light which has been wrought into a halo. The press is planted on the schools; the professions draw their nourishment from the schools; scientific associations are composed of men who were awakened to the value of knowledge in the schools. We, as teachers, cannot get much spare time directly to widen the sphere of the known and climb up the heights toward which the people look with wonder and awe, but we can turn the eye of youth of stalwart mental life to those great heights, or across the boundary of the known, and they will gain victories and conquer fields of truth which would never have been seized had it not been for us. We may not have time to fight all these battles by which the world is to be brought out into the clear light of truth; but we can drill the soldiers and stir their souls for the warfare who for us will gain the victories by which the race is intellectually redeemed. To equip an army, teach it the manual of arms, fire it with patriotism, and make known unto it the secret of successful warfare; this is more than a mere fighting of battles. Others may wear the crowns, but you have made crowns possible. The civilization of the day is what you make it, in its direction and in its measure.

Two questions require an answer—a fuller answer than I can here give them. *First*, What should the teacher be? *Second*, What should he do to meet the demands of the position he occupies?

That he should be learned, thoroughly equipped with knowledge which he is expected to use, is evident without my saying it. Accurate and some-

what extensive scholarship is of course indispensable. But more than this is required. He should be an enthusiast in learning. The temple of truth should be his home, his shrine, prized beyond everything else. Scholarship should not be worn as an outer garment, but it should be his life. He should be a teacher because he loves to handle truth. He must be a student, a thinker, his intellectual being delighting in the treasures of knowledge. Why does he not choose business? Because he prefers scholarship to money. Why does he not take the law? Because he believes in the *integrity* of truth. Why is he not a politician? Because truth is never partisan, and he loves it too much to put himself where he will be tempted to be unfair. Why is he not a physician? Because he fears that none of the pathies are wholly impartial. I will not ask why he does not choose the ministry. In the profession he has entered there are no motives to bolster up errors or enthrone falsehood. It is his life to make truth clear and convincing, and secure its triumph in the race. The most vital qualification of the teacher is his ardent impartial love of truth. Thus possessed, he is more than half armed for the warfare against ignorance. But I need not take your time for elaboration of this principle.

The other question I raised is this: What shall the teacher do to meet the demands of his position?

At the outset I may say that it is his business to see that his pupils are more than pupils, that they are students. He is not employed to masticate and digest all the mental food for the school; each pupil must do this work for himself. It is his office to inspire an ardent desire for knowledge, and to guide the student in his own efforts to gain knowledge. Less a teacher of facts and principles in any branch of study than a guide for successful mastery over difficulties. He is not the best teacher who imparts the most information day by day, but it is he who gets the pupil into the fullest working order, and leads him on to personal achievements. The important point is not how much knowledge a student has at the end of a course, but how he has obtained it. Real culture is self culture always. It is the blows the pupil strikes, not the blows—mental blows—the teacher strikes which tell most mightily for greatness. There is such a thing as great learning with intellectual weakness. Such learning is poured in from without, not dug out from within. The mind that holds it is a reservoir, not a concentration of thinking energies. He who does not lean on the arm of another, but with firm tread marches through a course of study, gains strength at every step. This, then, the teacher should do. He should seek so to manage his school that each pupil shall become a self reliant student, his office being generalship, doing the thinking for the student only so far as it will enable him thereby to think more wisely and successfully in the future.

The end for which a teacher should labor is not fully expressed by the word scholarship. The State has not established a public school system, taking in both the lower and the higher grades or work, solely for the purpose of developing a scholarly race of men and women, but to secure the best social and civil life. It may not tax you to give me an education unless thereby your property will be more secure, your life more fully guarded, the civil institutions under which you live made more stable, and the general interests of the civilized people promoted. Not for scholarship as an end, but for *public good* through the teachings of the schools. We are accustomed to say that in a free government, a government by citizen

suffrage, the safety of the State depends upon the intelligence and morality of the people. Two factors, intelligence and morality. The individual seeks intelligence for its own sake or his own sake. The church teaches morality because of its value to individuals. The *State* endeavors to make the people intelligent for the State's sake, and if it teaches morality at all it is that the State may be more secure. With it morality and intelligence are not the end, but a means or condition for public, in distinction from individual good. The individual is taught because the *public* is to be reached through the individual.

Man, having reason, conscience, will, is a moral being. And it is because of his moral nature that responsible society is possible. Without the faculties which make him a moral agent statehood could not exist. You can neither govern man nor teach him without treating him as a moral being.

What, then, is the work to be wrought out in the schoolroom? It is to guide the young in the development of *character*. The two factors which primarily and principally enter into character are intellect and will—powers of knowing and choosing. To spend all the energies of our school systems, with the millions of money used, and the hundreds of thousands of teachers employed, in training the intellect alone, leaving the will out of the account, would be both a wasteful and dangerous procedure. The State needs something more than this, society needs something more, the rights of person and property need something more, our associate life, in the interest of which the schools are established, needs something more than this. All schools of lower or higher grade—from the primary up to the university—take cognizance of the habits of the pupil; and no court of justice could be found that would fail to support the authorities in dismissing an incorrigibly immoral boy from the school. And our duties are more than negative—keeping out vicious influences—they are not fully met unless we seek to guide the young into moral modes of life, to stimulate moral ideas and strengthen moral purposes. How the teacher can do this I need not here discuss. The problem is not purely, nor perhaps mainly, one of dogmatic instruction. It is much broader and deeper than this. Moral training is a better term to express our work in the premises than moral instruction. Up to this point in our discussion there is but little difference of opinion.

But to teach religion in schools which are not private or church schools. May a teacher who is employed by the general public, paid from moneys collected from citizens without regard to *church* preferences, some of them not accepting the Bible as a divine revelation—may such a public servant teach religion in the schools? Morality principally rests on the brotherhood of man. If there was no brotherhood the moral code would be changed in almost every particular. But the brotherhood of man grows out of a fatherhood of God. We must be children of a common parent or there is no brotherhood. Hence duties resulting from the brotherhood of the race cannot be taught rationally, philosophically, without the recognition of a divine fatherhood. To give a reason for the moral code, to enforce the moral code there must be included in all our teachings the fact of a personal God. Eliminate God from the beliefs and convictions of the race and governments would be an impossibility, or if they succeeded at all the most potent force for the prevention of vice and crime would be absent. Good government requires something more than the prudential considerations of safety or happiness; it requires convictions of right and responsibility,

resting back on Infinite power in which there are original rights of governorship.

Thus I emphatically assert that the instructor who teaches in the spirit of agnosticism does two things, (a) severs truth into fragments, and (b) contributes to the elimination from society and government of the most completely regulating force that belongs to our civilization, *and to secure which the school system has been established.*

But if by religion is meant ecclesiasticism, its exclusion is surely demanded. It is not your business, so far as you are in the service of the general public, to enforce any views you may hold on ecclesiastical questions, ecclesiastically to help one portion of the public as against some other portion of the public. You are employed to do a work of an entirely different character. And I am frank to say to you that I do not conceive it to be the prerogative of teachers in church colleges, unless these colleges are theological schools, to use their position to indoctrinate their pupils in the creed of any church. The pulpit, the church press and Sabbath-school can do such work.

Yet if by religion is meant the recognition of an intelligent first cause, this the starting point of all systems of truth, holding that nature is a creation, and that creation necessarily implies a Creator, that without a Creator we take out from under science its very foundations, then surely religion may and philosophically must be taught in the interest of truth. If science and religion link themselves together, neither alone complete, neither independent of the other, the attempt so to secularize thought as to exclude the infinite intelligence would be unphilosophical, and so far as successful would be pernicious. Yes, I would completely banish ecclesiasticism from the schools, but I would keep God there. We may not secularize God out of scholarship, and hedge Him within the domain of feeling, as some have demanded. He cannot rule in the heart without first ruling in the intellect. If there be a God at all His throne is truth, and from this throne only can He rule the heart. Unless He sways His scepter over man as a thinking being He cannot purify and guide the affections. You can as easily conceive of a human mind consisting wholly of feelings—no intellect or will—as to think of God ruling the heart of man but excluded from his intellectual life.

Though pantheism is both fallacious and pernicious in its influence, a personal God before all things, working through all things, and revealed by everything that enters into the makeup of this universe is the most important and vital of all truths. No, God must not be dethroned, even in the schoolroom; if He is the State will suffer, and the character of the young be made out of a flaccid moral fiber. The race will not and cannot have a grand life unless Jehovah maintains his throne at the very center of our intellectual and moral being. The thought of the world must be theistic, and it is the work of the teacher to make it theistic. It is his prerogative to find a rational foundation for the entire universe of being with all the moral consequences that flow therefrom, of responsibilities to God and duties to our fellow men.

Just a moment more. It will enforce what I have said to remind you that in every domain except where divine power is displayed, the product is always considered in connection with the producer, the art as illustrating the genius of the artist. Whoever thinks of discoursing on the sculptures of Phidias as though Phidias had never lived, the thought wholly

given to the sculpture, none of it to the sculptor? Could Michael Angelo drop out of history, his works only surviving? Would the art loving public permit the art to be divorced from the artist? Would it be morally honest to withhold all the honors earned from him who has earned them? Would the historian think of recording historic deeds without the doer? Shall we write the history of the Revolutionary war with no mention of Washington? Would you, could you record the struggles through which the Rebellion was overthrown with no mention of Grant, or Sherman, or Sheridan? Could you write up the founding and progress of American institutions without connecting the same with the historic personages out of whose brains these have sprung? As easily could all this be done, as rationally might we attempt to do it as to teach truth in any line in utter disregard of its source. Such a historian would find himself wholly without readers, and such a teacher of science should have no pupils. The mind of the infinite planner may not be divorced from the plan.

It is ours to teach truth in its integrity, and so to guide and build up the civilization of the age that knowledge shall not be partial and fragmentary, but rounded out into absolute fullness. Thus only can we render the best service to the world in the vocation we have chosen.

WHAT CAN THE TEACHER DO TO INSURE IN THE FUTURE A HIGHER STANDARD OF POLITICAL MORALITY?

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I.

It cannot be maintained that the branches of common school instruction have ever been established by any scientific study of the conditions of complete mental development. And it would be surprising if, in the school curricula of the State, that have been established almost by chance and have been continued by the individual predilections of superintendents and principals, that civil government should have either its proper place in the course or its proper methods of study. However profitable it might be to examine those principles that lie at the foundation of political morality, and show what principles are necessary for the continuation of Anglican liberty, as teachers, we are more concerned in that civic instruction which has its origin in the schools, and for whose results we are, in a greater or less degree, responsible. It may be granted that all correct education is of benefit to the State, but there are a few branches of study wherein the nature of government is made the particular subject of investigation. And excepting the special work that is done in our colleges and university, civil government is the only branch wherein the theory and discipline of knowledge can meet and unite with those practical principles that underlie national existence.

Before we can estimate the value of civil government as an influence toward a higher political morality, the nature of the subject must be correctly conceived. Each branch of common school instruction may be regarded as having definite bearing upon that complete life which is the object of education. Upon physiology men depend for those practical principles that underlie their physical happiness; by the study of science, man is kept from those unnecessary fears that terrify the ignorant; while through the instrumentality of the various disciplinary studies he is enabled to use better his practical knowledge. Physiology, rightly taught, is of great culture value, and with an important practical bearing on the concerns of life; geography is a liberal study with little practical bearing on the concerns of life; and whether we shall classify civil government with

the one or with the other or with neither, depends on the way in which it is taught. Ideally, the study of civil rights and duties is as necessary to the body politic as a knowledge of correct hygienic principles is necessary to the welfare of its individual members.

But if it be said that the consensus of public experience has established a kind of overcurrent of public duty that renders special instruction in citizenship unnecessary, it should not be forgotten that this negative policy, sufficient, perhaps, for the days of halcyon peace, cannot stand the State in need when assailed by oppression from without or threatened by the growth of corruption from within. A public sentiment fathers its own child and justifies those very acts its influence has created. If, then, through his school course, a pupil has learned nothing of his civil rights and nothing of the duties of citizenship save from the bribes and bickerings of contending factions, his influence in the future will help on a public sentiment which will accept encroachments of injustice with stolidity, and bear the loss of his civil rights as the inevitable duty of a slave.

Of the 6,900 school districts which report to the Superintendent of Public Instruction, about one-half are returned as giving some time to the study of civil government. And when it is known that the majority of these instructors are youths far removed from active participation in duties of citizenship, and that the study is confined almost wholly to the verbal study of the mere written constitution, it must be granted that civil government, in its reality, is a far different thing from civil government in its possibility.

It must further be acknowledged that, excepting the comfort which comes to one from knowing something of the constitution as unrelated knowledge, the study of civil government, as commonly pursued, affords no new field of information and no completer rounding of the faculties than is given by its sister subjects—history and geography. It is true that the grammatical study of the clauses of the constitution, together with those questions which are based upon it, develop a kind of sharpness which, while it lasts, justifies the causes of its existence. Yet its influence is but temporary, and long before the period of the franchise comes time has destroyed all traces of the constitutional gymnastics. A boy might better view the constitution through the dim mists of a curious ignorance rather than, knowing it closer, to be repulsed by the irksomeness of its unmeaning details. If the constitution is to be made an inspiration, the teacher must possess that generous scholarship which will enable him to choose the materials of instruction with judgment—he is not teaching a completed growth, a dead law, but an instrument in which is contained the wisdom of his race. Many clauses of the constitution are rich in history, others are made sacred by the blood of sacrifice, and through all there is a progressive national conscience.

Year after year we have the discussions *ad nauseam* of “How to teach history?” “How to teach arithmetic?” And on the hypothesis of a poorly educated body of teachers these questions always will be asked, always unanswered.

If, now, the majority of teachers were men and women of culture four-fifths of all the drivel of “How” would disappear. The question usually is, “How shall incompetence teach?” It should be, “Shall incompetence teach at all?”

Any improvement in teaching that does not look for a higher scholarship in the teacher can be only temporary in its effects. The teacher in civil

government, then, must know something of the great works of Kent, Curtis and Story; if he would understand the constitutional growth of his country, he must know something of Von Holst; and because the constitution, studied out of relation with the past is almost meaningless, he must read some such work as "Lieber's Civil Liberty." Just as in history, the textbook is only one of the factors of successful instruction, so in civil government, biography, history and law, must all unite in supplementing the work of the recitation. But if it be said that it is idle to expect such preparation on the part of the teacher, then civil government, otherwise taught, is filling no want in the educational system of to-day, and the three thousand school districts where it is not taught are philosophically correct in keeping it from their courses of study. In most schools we find subjects best taught which are fixed in their nature and call upon the teacher for but little more knowledge than from the pupil; while subjects that are progressive are either not taught at all or only indifferently. We find many a man teaching for the rest of his life branches of study on work done in the pre-historic times of his life. But civil government is one of the branches of study that cannot be taught successfully on any such foundation. It is true, the years of one's preparation may not bring the completest scholarship, but they will bring more; they will bring that love of knowledge, and that fine taste for the philosophic relation of things, which is better than knowledge. Men enter the work, though inwardly condemning the foolishness of teaching, using their positions as a kind of purgatory wherein the sins of their ignorance are softened down for an entrance into the heaven of their chosen business. It may be well to bear this truth in mind—our profession will never occupy its proper place of honor and usefulness until the mere transients in its ranks cease to establish the standards of its progress.

In any correct system of civic instruction, knowledge must form the basis, yet knowledge alone is not sufficient. The welfare of the State demands kinetic, not potential energy. This sentiment is shown in the singing of patriotic songs, the increased publication of patriotic literature, and the hoisting of the flag upon the schoolhouses of the State. However much men may differ as to the interpretation of that term "patriotism," all must agree that it does not consist entirely in feeling, but finds its best expression in action. A man may thrill with the music of the Star Spangled Banner, and remain a clod forever afterward; a boy may be moved by the swelling periods of liberty and union and show himself unworthy of liberty when left in a room without his teacher. Many pupils associate patriotism with some form of physical prowess; and indeed they have cause, for our patriotic literature is full of sabre strokes and sulphur smoke. It is here that the teacher can show that patriotism is not for the battlefield only, but that it lies in being a useful and high minded member of the commonwealth. The pupil may never shoulder a musket, but by learning a useful trade he may add to the credit of his community; he may not adorn the legislative halls, "th' applause of listening senates to command," but by a careful and conscientious study of his civil rights, he may set the example of duty just as inspiring as the duty of the tented field. His influence may be small, but it can go through a life, and it may shame vice and exalt virtue.

" Our fathers to their graves have gone,
 Their trials past, their triumphs won ;
 But sterner trials await the race
 That rises in their honored place ;
 A moral warfare with the crime
 And folly of an evil time."

As the pupil learns how liberty was won, he also sees how it may be lost. He then sees what to resist and what to encourage. Thus taught, civil liberty begins in the home, and in the school ; and educated in the atmosphere of true liberty, he enters on his manhood's privileges, feeling that individual liberty is better than life, and individual slavery worse than death.

If the pupil, then, is to be taught this high performance of duty, he must know what his duty is, and here arises the necessity for the teacher to understand the present administration of government, in order that he may put the pupil into intelligent relations with the great questions of the age. In accordance with that tendency in society which often places the ornamental above the useful, many text-books devote pages to technicalities, while the present administration of laws is ignored. It is well for a boy to understand the relation of the State and the government, but it is better for him to know of the elementary principles of banking and something of the great laws of finance. A boy is not left to learn his first principles of history or science from the slums and the street corners, neither ought he to be left to learn of citizenship from the sophisms of the ignorant or the selfish claims of opposing parties.

Among the principles to be taught can be stated in the following words:

Every man exercising the duties of citizenship is bound, by his nature as an intelligent and rational being, to investigate to the fullest extent of his powers, the effect of every political act he does, and the foundation of every opinion that he holds.

Every village affords illustrations of those who talk without clear ideas, and act without adequate information. This the pupil should learn to despise.

The man who shoots another because he "didn't know it was loaded," is a monument of virtue in comparison with the man who takes his ballot from the demagogue at the polls and ignorantly votes to hamper the workings of good government, or encourages profligacy and corruption in the business of the State.

The pupil must be taught that base men thrive on the fancied security of the good, and there is a tendency, for various reasons, for one to surrender himself to those whom he regards as his superiors ; and that such surrender, when it shuts up brain and conscience, is slavery.

" While there's a grief to seek redress,
 Or balance to adjust,
 Where weighs our living manhood less
 Than mammon's vilest dust—
 While there's a right to need my vote,
 A wrong to sweep away,
 Up ! clouted knee and ragged coat,
 A man's a man alway."

If intellectual indolence predominate in the republic, demagogues will rule; but in the continued activity of intelligence there is a higher political morality and safety.

Born as man is, with the poison of fallibility in his veins, and surrounded on all sides by influences that check the growth of mind, it is not strange men find the fight against public wrong hard, and are tempted to give up their independence. But, not only is eternal vigilance the price of liberty, but intellectual vigilance is the price of manhood. And the pupil should be taught, through all his school course, to feel that he has not well acted, unless it is in the light of the fullest knowledge and for the highest purposes. He should be taught that the world is full of solemn questions that are to be settled only through the intelligence and integrity of such men as himself. And from his school he should receive such knowledge as will cause him to view his public acts with as much solicitude as the duties of his private station. It is here that the educated teacher finds work, not only in teaching the philosophy of the past and the practical duties of the present, but in founding both on the rock of a conscious integrity.

The school is but one of the influences that lead toward a higher morality, but the possibilities of the educated teacher may well cause us all to question anew our fitness for the work. If this is done in the spirit of the broadest patriotism, there will be no need to ask if civil government is of value as a study, but men, seeing its fruits, will crown it with a diadem of imperial worth.

II.

SUPERINTENDENT D. A. HAMMOND, CHARLOTTE.

As it became the duty of the Roman Dictator to "see to it that the commonwealth received no injury," so should it be the duty of every American citizen in his own place and sphere of action to see to it that our republic receives no injury.

But to the educators of our youth the injunction should come with redoubled emphasis. For a nation like ours, composed of a heterogeneous population, based upon universal suffrage, and dependent therefore for its continued existence upon the intelligence and loyalty of the masses of its citizens, imposes duties upon its educators which those of no other nation are required to meet.

A strong centralized government with great standing armies with which to suppress the revolt of ignorance and disloyalty can control a heterogeneous population, but our only appeal in such cases is to the ballot and the patriotism of the individual.

It is of the utmost importance, therefore, that the individual be able to vote and perform the other duties of citizenship intelligently and not ignorantly; and to this end a knowledge of the fundamental principles of free government, and the chief duties and responsibilities of citizens are among the things which the State should teach those for whose training for citizenship it is responsible. At no time in the preceding history of our republic has the necessity for such teaching, and for the teaching of a sound, healthy, aggressive Americanism in the public schools been so pressing as now. This necessity arises from the continued pouring into our country of

an element alien to our language and institutions, ignorant, degraded, prejudiced and embittered, perhaps, by long years of real or fancied oppression. These illiterate and unsympathetic hordes are filling our land with homes that are anything but nurseries of American patriotism. They huddle together by nationalities both in country and city, where they retain their foreign language, tastes, habits, social customs and prejudices. They do not come in contact with our educated classes, do not affiliate with those who are truly loyal to American ideas, and hence are separated from Americanizing influences. They have had no training for self government, know little of our methods, our history or our traditions, and are indifferent to the spirit if not the forms of our government. Their inability to speak our language, their prejudices of birth and training, their unfamiliarity with American questions, all unfit them for intelligent participation in our electoral contests. And yet our government, with unseemly haste, confers upon them that most precious of all political rights, the elective franchise, and their votes in the ballot-box count as much as our own. They form settlements in the great west, where they set themselves apart from Americanizing influences and retain in their integrity, their race, language, religion and customs, thus forming States within a State. They settle in the slums of our great cities, where whole blocks of tenements are occupied by aliens, and give to them their political complexion. They thus have added as yet insurmountable obstacles to the problem of municipal government. Across the sea they were subjected to many restraints, but here they very soon learn enough of American freedom to become disorderly and dangerous, and a serious menace to our civilization.

When the late reconstruction acts of Congress thrust into the hands of the negro the unqualified grant of suffrage, the strain proved too great, and while the forms of free government have been preserved, its most essential principles have been violated. And it could not be otherwise, for says a recent writer: "If the control of the government passes into the hands of the ignorant, civilization is in danger, and intelligence is forced to regain the supremacy even by revolutionary methods if necessary." These ignorant classes of voters, having no appreciation of the value of the ballot, become the prey of unscrupulous demagogues and are bought and sold by corrupt politicians. Party leaders pander to the prejudices of these classes as their numbers increase, and the tone of our political contests sinks lower and lower. Recent experience has shown how possible it is when public opinion is so evenly divided as it is between the two great parties of this country, to determine the policy of the government on questions of great importance by the purchase of a few thousand votes in the slums of our great cities.

How are we to reach these dangerous classes and eliminate from our system these evils which threaten the perpetuity of free institutions? I answer that, so far as these evils result from ignorance, the only cure is the better education of the voters and their children. We must raise the lowest classes in the State to a higher plane of political morality or they will drag us down. And the more difficult the task becomes, the greater the responsibilities of educators. Ignorance is never a qualification for free government, and in a republic like ours, where every citizen in town, city, State or nation constitutes a part of the governing power and is responsible for public measures, we can ill afford to allow any part of our population to remain unenlightened as to the nature of free government and free

institutions. A clear understanding and a widely diffused knowledge of our institutions and the benefits they have confirmed upon our people cannot fail to arouse patriotism and present motives to high character. Indeed, such knowledge is absolutely essential to national progress and well being.

The cheerful optimism which is a characteristic of our people, proceeding upon the axiom that "whatever we should have appear in the character of citizenship must be wrought into that character through the schools," looks to the public school as the one force which is to assimilate and unify all classes and conditions of our people. The public school is, therefore, or should be, a political institution in the broadest sense. Here we have the children of the nation brought together in a way which makes citizens of all classes know each other and prevents the alienizing influences of caste which is a grave danger to democratic institutions. "And we can if we will," says one of our prominent educators, "teach them in the schools so much of the grandeur of our possessions, of the heroic in our history, of the brilliant in our prosperity, of the fascinating in our traditions, that the fathers of the future will be willing to vote for and die, if need be, for the American idea; that the mothers will teach their sons to develop our resources by industry, to honor the historic heroism of our sires, to project the brilliancy of our prosperity into the future, to cherish with unswerving devotion the traditions of the land." In order to accomplish this our educational system which was framed to meet the needs of American children and those of foreign born citizens who were anxious to become Americanized as soon as possible, must be modified to meet these changed conditions. Our American youth, born and bred in the typical American home, are certain to grow up good citizens, with love of country as the dominant sentiment of heart and brain, but the children of the foreign element in our population must be Americanized in the public schools or not at all.

Hence the public school of today and of the future must teach, in addition to the useful but colorless elements of knowledge which may be useful in private life, the elements of a sound, healthy, genuine American patriotism. Whatever tends to produce the ideal American citizen, honest, industrious, sober, discreet, liberty-loving, liberty-promoting, should find a place in its course of study. All of our youth should be carefully instructed in the story of the building of the nation, that they may appreciate the fact that out of patriotism, self-denial and endurance has grown all that we hold most dear; they should be taught the political principles upon which our government is founded, and in accordance with which it should be carried on, that they may be prepared for the duties of citizenship; they should be informed as to what our liberties and institutions have cost in treasure and noble lives, that they may know their worth, their inestimable value to the American people.

If our youth are so instructed they cannot fail to be profoundly impressed with the privileges and responsibilities of freedom, the honor and obligations of citizenship, and the nobility of devotion to the state. To this end the study of civics, American history and biography should be made prominent in all grades of our public schools.

The instruction in civics should include much more than was given in the old-time text-book on civil government. All the branches of our government from the township to the nation, together with their relations, circumstances and causes for being, should be unfolded and spread out before the

eyes of the pupil. Especial study should be given to the smaller units of the system, as the average citizen has vastly more interest in the affairs of these than he has in the affairs of the nation. The town, the village, the city, the county—why and how organized, the officers of each and their duties, together with the forms and purposes of certain legal documents, and something of the methods of transacting public business, all should be clearly presented. Upon this foundation should be built a knowledge of the national and state governments, and our aim should be to make the average student as familiar with the constitution of the United States as he is with the fundamental rules of arithmetic. In order to secure the best results in knowledge, discipline and interest from this subject, pertinent and practical questions and discussions which compel study and original thought should be introduced. "This branch of education," says one, "will tend to awaken and stimulate sentiments of genuine loyalty to duty and patriotism in the administration of the affairs of state and nation. Such teaching will develop principles of action that give dignity to the individual, increase respect and reverence for home, and exert a salutary influence in the discharge of all public and private obligations."

American history and biography also furnish opportunity for the indoctrination of patriotism and for the leading of American youth to fit themselves for the duties and responsibilities of citizenship. The spirit of adventure of the old navigators which gave us a new world; the hardy endurance and the sufferings of those who laid the foundations of a new empire; the sturdy independence of their sons who, at the risk of property and life, rose against the tyranny of the mother country, and their trials and devotion in establishing the independence of the United States; the unselfish patriotism of those who left family, home, wealth, and imperiled all that the government of the people should not perish; the lofty ideal of public honor and duty entertained by those who have shone in civic as well as military careers—such histories, when enforced by the voice thrilling with emotion and dwelling on the beauty and loftiness of patriotic sacrifices, cannot fail to inspire a love of country and loyalty to its interests which will cherish its virtues, eliminate its defects and protect it from enemies at home and abroad. But listless and perfunctory teaching of our history will not accomplish such results. A single hour's earnest, animated talk upon the history, scope and purpose of our republican government to a room full of boys and girls—the children of Irish, German or Italian immigrants—may be made of more worth than a month's conning over the text-book. And if we would make this training most fruitful in results, we must begin it early. We cannot, in fact, begin too early to teach our boys something of their splendid inheritance. They should be taught to regard themselves as citizens of the republic and entitled to share in the blessings which it confers. They should also be taught to love and reverence the flag and the names of our illustrious citizens who have preserved it to them, to sing our patriotic songs, to declaim the stirring sentiments of our national oratory, and to hold in loving memory the glorious achievements of our country. They should be impressed with their obligation to transmit to future generations their inheritance, not only in as good condition as they received it, but broadened and strengthened. Impressions made at this time of life are lasting.

It is during this impressionable period that the children of foreign parents must be taught love for this country and its institutions, and impressed with

the value of American citizenship and the sacredness of the ballot. If the school fails in its duty in this respect, these children will grow up German, Irish, or Italian in about the same degree as their parents before them. But when they are thus taught, we can depend upon them to overcome in some degree at least the alienizing influences of their home associations. If, then, the public schools are to become the guardians of American ideals and are to teach and inspire patriotism in communities where it is ignored, our teachers must be men and women enthusiastically American in feeling and deeply imbued with the spirit of our institutions. They must be men and women who are permeated with the purpose of teaching the young heart of the nation to entertain lofty ideals of citizenship, of public honor and duty, and to foster a willingness when need comes to perform public service at any cost. But if the public schools are to do their full duty in assimilating and Americanizing the vast army of children of the foreign born immigrant, and in putting on a higher plane the whole body of people, they must develop not only the mental but the industrial and moral qualities of the pupil. Sentiment must not be fostered at the expense of practical development. Culture must not prevail at the expense of that training which is of vastly more importance to the many in the actual struggle of life.

All children should be taught to know, love, and respect labor, and appreciate correctly what it costs in sweat, weariness and hunger to produce the articles of every day use which are so necessary to our comfort and happiness. The person who has never performed manual labor cannot fully appreciate the cost of labor products nor comprehend the social value of the working class of people. If we could know the history of the construction of every product of labor that ministers to our daily comforts, we would shudder over the human misery they represent and would be constrained to act more humanely toward all classes, and much of the spirit of caste would vanish away.

The teaching of children and youth to find pleasure in labor removes the temptation to idleness and immoral dissipation. And the feeling of capability and usefulness and independence resulting from labor and training, awakens dignity, nourishes thought and directs toward a higher plane of morality in all the relations and duties of life.

Finally, the school of the future must emphasize character. We must teach the children to be upright and honest, to love justice and mercy as well as to be active members of the body politic. Education without character may be more dangerous than ignorance. Of course education and good character need not and usually are not separated.

But it should not be taken for granted that mere training of the intellectual powers will lead to the development of good character, and that secular education is, therefore, a specific for social evils and popular discontent. It is possible, I think, for the masses to be informed more rapidly than they are reformed, and as a result those who raise themselves to positions of wealth and power (as but few can) affect to look down upon and to oppress the multitude from which they came out, and thereby create a spirit of caste, of strife and difficulty. The only cure for such evils is to teach men to know, to love and to practice truth, justice and mercy.

To this end, as has been well said, "The State must teach morality to the army of the young, the morality that lies at the basis of the citizen's duty in every sphere; the spirit of humanity, of duty, of honesty, of patriotism,

of courtesy, of forbearance, and of self-control; the sentiments that refine and elevate character and ennoble and dignify one's influence." But how are these lessons in systematic moral development to be presented to the young? Not through the text-book and recitation certainly, nor by the laying down maxims of good conduct, nor yet by special exhortation. They must be given incidentally. It is to the personal influence of the faithful teacher that we must look for the inculcation of such principles. Hence the real value of a teacher depends quite as much upon his moral influence as upon his intellectual ability. It is of the greatest importance, therefore, that those who sit in authority in the schoolroom should be men and women of good character and good sense.

And may we not hope that "when the great body of the youth of successive generations are so taught and disciplined, we shall have order without force, government without arms, power without excess, and freedom without license."

III.

SUPERINTENDENT WM. J. COX, HANCOCK.

Political orators often boast of the rapidly increasing population of the United States, and sometimes picture the glory and strength of our nation when it shall number a hundred millions or two hundred millions of people. This flatters the national vanity, and seems to be the natural accompaniment of brass-bands, fire-crackers and sky-rockets. But when the excitement is eliminated from the problem, and the facts are studied in the cold light of reason, is there not grave cause to fear that there is more of danger than of promise in these rapidly increasing millions?

Great nations have little to fear from without—much to dread from within. Hence the rapid increase of population, beyond a certain limit, may mean a corresponding increase in the elements of "internal resistance." This is certain to be the case if many of the added members are wanting in the virtues which characterize and actuate good citizens. Ignorance, vice and political corruption are dangerous foes to any government, but most to be feared in a republic, where bad citizens have a voice in making as well as an active part in breaking the laws. Referring to this matter in his inaugural address, the late President Garfield said: "We have no standard by which to measure the disaster that may be brought upon us by ignorance and vice in the citizen, when joined to corruption and fraud in the suffrage."

In a land where thousands of illiterate foreigners, with little or no conception of the responsibilities of citizenship, are permitted to deposit ballots which they cannot read; when more than thirty per cent. of the voters of the Southern States are illiterate; in a country where more than two hundred thousand persons are engaged in the rum traffic; where vice and political corruption are holding high carnival in the great cities—in a nation which furnishes an asylum for all of these and other elements of danger, *the home, the church and the school* have enough to do, if each does its full share of the mighty work.

Is the school discharging its full duty to the rising generation and the republic?

In 1885 the school population of the United States was 17,169,391. Total enrollment in public schools, 11,169,923. Average daily attendance, 6,520,300.

These figures show that only about two-thirds of the children between six and sixteen years of age were enrolled in the public schools, with the average daily attendance but slightly in excess of one-third of the youth of our land.

And of the number in regular attendance, how many receive any systematic instruction in the branches most needed for the intelligent discharge of the duties of citizenship? Instruction of this character is confined chiefly to the upper grades, and as the great majority of the pupils never reach the high school, they are thereby deprived of the training which is of vital importance to the nation.

In the North Atlantic States there are 64 high school pupils to 1,000 of the total enrollment; in the North Central States, 28 to 1,000; and in the Western States, 17 to 1,000. Without counting the Southern States, the general average is about 35 high school pupils to 1,000 of the total enrollment—or three and one-half per cent. If we double the result just stated, in order to include any grammar school pupils who have opportunities for thorough and systematic instruction in the line of direct preparation for citizenship, we have only seven per cent. of the enrollment.

Without insisting upon the strict accuracy of these figures and estimates, I believe they justify the conclusion that too few of the youth of the land are receiving the instruction and training demanded by the best interests of the nation.

As it is the aim and duty of the public school to prepare the youth of the present for the citizenship of the future, the prevalence of a low standard of political morality must be due, in part at least, to the partial failure of the school to accomplish the full measure of its noble work.

With a keen appreciation of the difficulties in the way, but with firm faith in the ability of the American public school to meet the demands of the hour more fully than it has yet done, it becomes our duty to inquire, *what can the teacher do to insure in the future a higher standard of political morality?*

The requisite conditions for a high standard of political morality are general intelligence, patriotism and individual morality. As Dr. Bascom puts it, "The life of popular sentiment is private life." Hence, in order to secure the desired result in the state, it is necessary to cultivate its elements in the individual. What can the teacher do in this direction?

1. He can increase the enrollment, average attendance and interest of the children in the schools. If he is called a benefactor to his race who causes a blade of grass to grow where none grew before, what shall be said of him who gathers the children from the highways and hedges and places their feet in the path which leads alike to good citizenship and individual happiness? The teachers of the United States number about one-third of a million now, and if every one would do a little missionary work in this direction the aggregate result would astonish the census compilers.

If, as Aristotle said, "The beginning is half of the whole," the surest way of interesting children in school attendance is to put the work of the primary departments into the hands and hearts of teachers who appreciate the sacred trust, and who know how to touch the magic springs of child-

life. With such teachers in the beginning, and equally good ones in all of the grades, non-attendance would be reduced to a minimum. With more skillful and enthusiastic instruction in the lower grades, there would be larger classes in high school and college, and consequently an increased number of intelligent citizens in the nation.

2. After securing the presence and interest of the children in the school, one of the first steps toward a higher degree of intelligence in the citizens of the future involves a more thorough and more successful instruction in the national language. The knowledge of language is the key which opens the treasure-houses of thought and wisdom. The child who has learned to read with sufficient ease and understanding to enjoy the reading of good books and periodicals has an excellent foundation for an intelligent manhood.

Much time is devoted to the teaching of reading, but the results are comparatively unsatisfactory. "After all this enormous waste of time and money," says Dr. John M. Gregory, "the number of pupils who learn to peruse with easy and critical intelligence the columns of the newspaper or the books they have occasion to consult, * * * is very small, and, small as it is, is made up chiefly of those who did not learn by reading in school, but from the private perusal of books furnished them at home or through the Sunday schools."

When the ability to read with ease is acquired during the earlier years of school life, it serves as a valuable aid in interesting the pupil in other studies, and thereby helps to keep him in school. And since all subsequent acquisitions are so largely dependent on the degree of proficiency attained in reading, writing, and speaking the mother tongue, there is little danger of overestimating the importance of this branch of education.

Moreover, since community of speech is a strong bond of union among the people of a nation, every child that lives under the sheltering folds of the stars and stripes should learn the English language. When that chubby little Finlander or light-haired Scandinavian appears in your school for the first time, in utter ignorance of every word you speak to him, and begins the struggle with the English language, the work is tedious enough, and you may be tempted to give up in despair; but remember that the task isn't half so discouraging to you as it must be to him, and if you persevere and succeed, you are helping to make an intelligent citizen of him. Your patient toil and self-sacrifice may not be rewarded by public opinion, may never be recorded on marble column, but—

"As hid seed shoots after rainless years,
So good and evil, pains and pleasures, hates
And loves, and all dead deeds, come forth again,
Bearing bright leaves or dark, sweet fruit or sour."

3. The teacher can improve the political morality of the future by cultivating the sentiment of patriotism. The branches of study best fitted to lay an intelligent foundation for this feeling are the history and civil government of the nation.

In a communication from the General John A. Logan Post No. 540, G. A. R., of the department of Illinois, presented to the officers and members of the National Educational Association at the Chicago meeting in 1887, I

find the following resolution, which was adopted in substance by the convention:

Resolved, That as the public school is established chiefly in the interest of national preservation and prosperity, its teachers should, in all their teaching, emphasize and magnify whatever tends to make our youth appreciate the privileges and intelligently discharge the duties of American citizenship; that the history of the nation and the principles of civil government and law should be taught in all public schools, and that loyalty, patriotism and obedience to constituted law should be diligently impressed upon the minds of all our children.

"History," says Compayré, "is an admirable school of patriotism. By means of it, one's country ceases to be a cold abstraction; it becomes a real, living being, whose destiny the pupil follows through the centuries, gladdened, elated by its successes, moved and affected by its reverses. Instructed by the principal events of the national history, familiarized with the names of its illustrious men, the child will believe himself a member of a great family, which he will love the more because he will know it the better. He will feel himself pledged to defend the heritage of his fathers, when he knows at what a costly sacrifice it has been acquired and preserved. He will be ready to imitate the beautiful and noble examples of his ancestors when a faithful narrative has nourished his imagination with them."

Probably none of us will question the truth of these sentiments, but, as there is often a considerable margin between the limits of accepted and applied theory, it is possible that not all of us have done everything in our power to teach these studies in such a manner and to such an extent as to secure the best results.

Most schools, it is true, include United States History and the elements of Civil Government in their courses of study; but the time allotted to them is often insufficient to insure the making of deep and lasting impressions. In a half year or a year the pupils are hurried from Christopher Columbus to Grover Cleveland, with about the same speed and thoroughness as that of the botanist who should attempt to study the flora of a country from the window of an express train. With more time, less haste, and increased thoroughness of the work, the patriotic teacher would have better opportunities for inculcating and fostering the sentiment of patriotism.

But it is not enough to give the best of instruction to the select few who reach the high school, forgetful of the illiterate multitudes that leave us while they are yet in the primary or grammar grades. They, too, will be citizens in the near future, and unless their numbers shall be greatly reduced, they will hold the balance of power.

History and civil government are no doubt wisely placed in the higher grades of the public school, as, in their more advanced forms, they reach upward into the clearer thinking of university life. On account of their immaturity, high school pupils are poorly enough prepared to do their work in these branches; it is not probable, therefore, that the systematic study of civics could be commenced with profit at an earlier period of school life.

But leaving the advanced work where it is—or increasing and extending it, if possible—shall we not teach some of the elementary facts and principles of the national history and government to all of the pupils of the grammar grades?

An experience of several years in the use of an outline course of oral work in civil government* has convinced the writer that much can be accomplished by a systematic course of oral instruction.

In history many valuable and interesting facts may be presented in the form of supplementary reading. The child's love of stories may be used to advantage by supplying him with interesting and simple narratives of the lives and deeds of distinguished patriots. The youth who becomes acquainted with such men as Washington, Franklin, Jefferson, Henry, Otis, Warren, Jackson, Webster, Sumner, Lincoln, Grant and Garfield, can hardly fail to catch some rays of patriotism from the radiant light of their unselfish lives and manly deeds.

If patriotic speeches and poems are used for declamations, and impressed on the memory by occasional repetition from year to year, the sentiments may be gradually assimilated until the words become something more than a mere jargon of unmeaning sounds. The boy who has learned to love the noble words of the patriot fathers, who lived in the "high, exciting times," that "tried men's souls," will have a higher ideal of citizenship and loyalty to principle than he would have had without this contact with the classics of patriotism.

Memory gems and patriotic songs may be made to serve the same purpose. It has been said, "Let me write the songs of a nation and I care not who makes its laws." And what country has more inspiring songs than our "America," "The Star-Spangled Banner," "The Red, White and Blue," "A Thousand Years," "The Battle Cry of Freedom," "Tenting on the Old Camp Ground," and other American gems. Let all the children learn to sing these patriotic words and stirring airs, and teach them to love the old flag. In this "piping time of peace" there is danger of growing indifferent to things that were dear to the hearts of our fathers, and that should always be dear to the citizens of a republic. We need to be aroused, and to remember that patriotism, like other virtues, cannot be reaped where it has not been sown.

All honor to the public spirit and patriotic sentiment that have placed the stars and stripes on so many Michigan schoolhouses. May the tidal wave roll on until every American school shall have an American flag, and until every teacher shall consider it his sacred duty and high privilege to do his utmost to prepare his pupils for a more intelligent and more patriotic citizenship in the future.

4. The teacher who wishes to aid in the much needed purification of the political atmosphere will not neglect to instruct and train his pupils in the principles and practice of sound morality in private life. As the stream cannot rise higher than the fountain, so public opinion and public action will not rise above the average level of private virtue. As intelligence and culture alone, without deep-seated convictions concerning right and wrong, will not make an honest man, so intelligence and patriotism, without the controlling power of moral principles, will not make an honest politician. But as morality, like patriotism, is not an inherited possession, it must be acquired by each individual at the cost of personal effort and careful training.

* Prepared by Principal S. E. Whitney, and published by the Principals' Association of Houghton County.

Here, then, is at once one of the most important and least occupied fields open to the conscientious teacher. Where is the school in which the training in morals is as successful as the work in arithmetic? We devote six or eight years of daily instruction to the classes in numbers—how much time do we give to lessons on honesty, truthfulness, justice, fidelity, purity and kindred virtues?

I do not include temperance in this list of neglected duties for the good reason that the persistent efforts of an energetic band of Christian women have succeeded in placing this subject among the required studies in many of the States, so that it is no longer an entirely optional matter. However, if the spirit is lacking in the teacher, I fear the instruction will be of little value.

I would not argue the wisdom of subjecting young children to lengthy sermons on morals—quite the reverse. But there are a thousand simple ways in which these noble lessons can be impressed in love and tenderness, without much use of formal lectures on ethics. Teach as the christian mother trains her child, as the skillful kindergartner instructs her class. In the higher grades, such a text-book as Gow's "Good Morals and Gentle Manners" may be used with excellent results.

As the child learns much by imitation, the daily management of the school and the example of the teacher are important factors in moral training. If falsehood, deceit, dishonesty and kindred vices are treated in the class-room as trivial matters, or overlooked by the indulgent instructor, it cannot be expected that pupils accustomed to this low standard of morality in the practical part of school life will profit much by the best of theoretical instruction in ethics. It is useless for the teacher to point to moral heights to which he is himself a stranger. But as these principles are commonly recognized, it is not necessary to dwell on them here. It is one of the modest aims of this paper to suggest that more time and emphasis should be devoted to the inculcation of moral precepts, in order to secure an intelligent foundation for better practice.

The teacher cannot do everything, but he can do much to increase the intelligence, arouse the patriotism, and improve the morals of the children committed to his care; and with a general improvement in the chief elements of good citizenship, a corresponding improvement in the standard of political morality may be confidently expected.

The fate of the nation is very largely in the hands of the teachers of the public schools. May they realize the importance of the sacred trust, rise to the full measure of their opportunities, and do their utmost to insure the perpetuity of the republic, and the peace, happiness and prosperity of an intelligent, patriotic and virtuous people.

GENERAL DISCUSSION.

M. R. HARTWELL, West Bay City, said:

Mr. President,—I came here for the purpose of getting information, not with the intention of saying anything; but I feel that we should not, as teachers, let a moment go to waste. I have been trying to follow, as carefully as possible, the papers that have been read before us, and I have been trying to find out whether or not we are advised to teach *beliefs*. I, for myself, believe that we should teach beliefs, and these beliefs should be studied carefully. If we do not teach beliefs, I feel that we are fall-

ing short, that we fail in the great point we teachers should aim for. And I wish to ask, Shall we refuse to make our pupils familiar with the Constitution because we cannot go further? In one paper that was presented here, a very grand idea was brought before us of the only proper method of instruction in civil government that is worthy of consideration; but provided the teacher has not had the extensive preparation indicated in that paper, has not access to all the means of acquiring information that was set before us, but yet knows something of the constitution of the United States, and can make pupils familiar with the constitution of the United States and some of the history of our country and the simple phase of civil government, now, because we cannot reach out to the full explanation that may be given in regard to the origin of the ideas of our government, shall we refuse to give them any familiarity with the simple principles of our government? Shall we stand back and say, "Because we cannot do all this, we will not do anything at all." The idea seems to be this: If we cannot come up to that grand idea set forth in the paper, it would be worse than useless to try to do anything at all. If we are not prepared to come up to that grand idea, we shall not take hold of the work? I would like further light upon that point.

SUPT. R. H. GULLEY, Mason:

I think some three years ago the question was asked in the Association as to what time it was best to introduce the study of civil government. I would like to ask one of the gentlemen who presented papers on this subject, at about what stage of the pupil's progress we should introduce this work of civil government. For myself, I have thought it best to try this work in connection with history, commencing with the sixth grade, and letting them follow from the work in the sixth grade, hand in hand through the high school, finishing the work with the twelfth grade. I would like to ask if that has been tested and, if so, what results have been found.

SUPT. COX:

I would mention the limit as between the fourth and the eighth grades. As soon as the pupil has learned to read well enough to read the books mentioned as supplementary reading, I would take it up, not as a systematic study, but as a very simple work. I understand that in some of the European schools they have books especially adapted to teach children in this way.

PROF. A. E. HAYNES, Hillsdale College:

I have been greatly pleased with many of the suggestions in all of these papers, especially by some in the first paper. I was glad that this was pointed out clearly: That it is as patriotic to bravely and loyally meet the responsibilities and duties of every day life—the responsibilities of citizenship—as it is to face unflinchingly the storm of death on the battle field. It seems to me that it is more patriotic to seek to remove the causes of ignorance, crime and war than it is to engage in war itself.

SUPT. CHURCH:

I presume in some men's minds there is a confusion as to the term "political morality." It seems to me that if we can succeed in teaching pupils common morality, morality in every day life, they will grow up to be politically honest. There is no distinction between political honesty and common every day honesty. If a man is naturally honest he will be an honest citizen. Teach every pupil there is something better than money getting; that it is a greater thing to be an American citizen than it is to be a money king. If you can teach him that there are some things better than life, the high standard of pure character, that there are some things worse than death, you have

done a good thing for that pupil. I want to make every child feel that he should be ready to lay all on the altar of his country and is sworn to perpetual fidelity to it ; and if his country calls on him for anything, be it high or low, he must stand ready to do his duty without deviation.

MRS. D. E. WOOD :

I have been very specially interested in this question from the fact that I have made history my special work. I find that when the sympathies of the children are aroused, then we have tremendous power over them. And I have found it is best to go back to the very earliest beginnings of history, or of the principles of liberty—to the days when the Bill of Rights and the grand old Magna Charta were wrested from the hands of the reluctant John. And I have been surprised to find how the sympathies of the children were aroused when I have shown them how their countrymen rose from oppression to liberty ; they care for them as their own. They become familiar with the names of prominent men in history, and little by little come to feel that they are as of household name, a brotherhood of their own.

SUPT. J. N. MCCALL :

There are two or three phases of this question that demand particular emphasis. One of them is the fact that a vast amount of foreign emigration is swept toward this country, and these people never become thoroughly Americans. It seems to me that one of the greatest dangers to our nation today is this foreign element, which comes here largely for the purpose of availing itself of the advantages of our civilization, and with not a proper understanding of our government and political institutions. One of the greatest works of teachers in this direction is the inculcation in the minds of the rising generation of at least proper ideas of American citizenship. It is undoubtedly true that purity of character on the part of the individual will contribute largely, and will in the main make good citizens ; yet it is also true that moral and well educated men of other nations, not familiar with our government, may do much to pervert that spirit of liberty which, it seems to me, ought to be prevalent here. The teacher should be particularly anxious toward the cultivation of proper ideas of American citizenship.

I think, also, that a few months' study of civil government or of the constitution of the United States will not necessarily make a good citizen. Citizenship grows with the individual ; and if this instruction is commenced early in the life of the pupil he will be a much better citizen than if he studied it only through a few months. I wish to emphasize that it should be begun in the grammar grades or before the grammar grades. It seems to me we are apt, in some of our schools, to place the State before the nation. I should emphasize *national* citizenship more than the rights of citizens as pertaining to the State alone. While we have a grand State, yet, it seems to me, the national government is before the State and ought to receive more consideration than it often does in our schools.

PRESIDENT SCOTT :

I want to say a few words, because I am very much interested in this subject. A professor came to me one day with a new book on civil government, and said he liked it very much and wished we might introduce it in our school. I looked over the contents, and said, "I have been waiting for a book that will teach the duties of citizens, not of the officers of the government. Everything done in the State comes through the citizens ; therefore the man that writes the book that I want is the one

that teaches the duties of citizenship ; if you do not have that book, I do not care what you use."

Political purity is the vital subject at present. I can remember when, if a candidate for office should come to the voter and say, "I want you to vote for me," the voter would say, "No ; I came here intending to vote for you, but I cannot now ; I will never vote for a man that asks for it." I remember the time when the congressman was informed of his nomination, for the first time, in the fields ; he was selected because they wanted him, not because he wanted the place. I can remember when the Lieutenant Governor of New York said, "Individuals have never cost me a cent in elections ; I have never spent a cent upon a single vote anywhere at any time," and he had been in political life more than twenty years. I remember the time when the man who was called the most corrupt man in New York was so called because he gave his pictures to voters. My idea is this : If we want political purity we must go to the family ; merely going to the children will effect nothing, for the children will be influenced at home, and the teacher, being with the child but a part of the time, can accomplish no lasting good unless the work is supplemented at home. So the teacher—being first politically pure himself and above all corruption—by papers, by publications and by addresses, must influence the home surroundings. We are in danger, and we want political purity.

We have been speaking about these flags on the schoolhouses ; the placing of flags on our school buildings is a grand thing to do ; but let me mention one thing I heard said when the flag was raised over one schoolhouse. The remark was made that the flag used to be the emblem of liberty and slavery, and that there was no glory in that flag then, but that now that slavery is gone from the country, it is a glorious flag. Is that right ? That flag was always glorious ! And let the child be taught that it ever was glorious and must ever be the object of his defense and love.

Supt. Hammond here requested that Governor Luce address the Association. The Governor complied in the following words :

Gov. LUCE :

Mr. President—I came in here to hear and not to be heard. I have listened to one paper and a portion of another, and my mind has been wandering 'round over the questions involved in this discussion ; it has gone backward to the years of the past. This discussion has embraced the American flag. It is possible, with my experience and years, and long connection with public affairs in humble and more exalted positions, that I might, with a little reflection, prepare something that would be of interest connected with this question you have under consideration.

I believe much as the gentleman who has just taken his seat, that the place to kindle patriotism and impress the lessons that shall purify, is in the home. And there is no individual in the American community who has so much to do with purifying and exalting the home surroundings as the mother. Upon her we must rely to some extent at least for lessons of purity in politics as well as in other things.

There was one suggestion dropped here by some gentleman who has made the remark that if we are to purify American politics, if we are to exalt American statesmanship, or benefit this grand, noble country of ours, we must impress not only upon the children but upon men and women that manhood stands higher than money. This desire for money is one of the threatening dangers to the public, and if you who train the little ones can impress upon their minds that there is something nobler to aspire to

than the influence and power gained by concentrated wealth, you will do a great service to the public for years to come. A morning's paper said a certain gentleman is going to be elected United States Senator, and concluded with "he is very wealthy." As you march along, impress upon all the danger in this direction. Exalt manhood, the nobleness of men, purity of character, and you will discharge your duty well to the public.

PROF. GEORGE :

I did not come here to say a word on this subject, but there is a thought I would like to bring forward. It especially pertains to the male members of the teacher's profession at the present time.

It is sometimes supposed by many good teachers that a teacher should not have anything to do with practical politics, whatever he may have to do with theoretical politics.

In my humble opinion, the teacher is qualified to mingle in the practical politics ; he is qualified to go to the caucuses to see that good men are nominated, and if necessary to go to the polls and work for his particular candidates. One reason the teacher does not have more influence on the politics of the State and nation is this timidity, this sensitiveness, this indifference to the current of practical politics. I am not afraid to urge that teachers should mingle with politics in a practical way. I always go to the primaries to look after the elections.

SUPT. FRENCH :

I have known it to be very injudicious for a teacher even to mingle in an election for school trustees, even though he has no idea of looking after the condition of the particular chip which he is floating at that time. I do not believe all that Professor George says; I think that the teacher ought to do with politics in the way of interest in the general morals and good government, but he should do it as a servant merely. I suppose Mr. George means politics in this broad sense.

PROFESSOR GEORGE :

I do not mean that a teacher should go and labor in the field of politics when he is personally concerned; I would not advocate a teacher going to a school board meeting and taking sides; that would be working for himself. I referred to the field of national politics, State politics. I say that if a person has a political conviction, he should not be afraid to express it. Some years ago I came to the conclusion that no political primaries should occur in my ward that I did not attend ; and so far as I have been able, I have kept that resolution.

WORK AND INTERESTS OF THE NATIONAL EDUCATIONAL ASSOCIATION.

SUPT. I. N. WELLINGTON :

Ladies and gentlemen and teachers of the Association and citizens—There is no particular reason why we, those named in the program and others that speak, should do the work any more than the rest of you. We are all interested in the National Educational Association; and so far as our interest and responsibility in the work of that Association, and aid of all educational work in our country, is concerned, we each and all have a part ; and you are therefore invited to utter your thoughts freely, fully and promptly as the opportunity offers. I can think perhaps of no other reason why we were selected to lead in this matter than the great scarcity of Michigan timber at the National Association at California and at Nashville. The present

president of the N. E. A. asked us to assume the duty of State manager for the State of Michigan. In that capacity, therefore, I stand before you, but I no more represent the Association than you should and do.

Without making any invidious distinctions between different parts of our country in educational work, I think there is not a single bit of live blood in this room that does not stir when we say "The Old Northwest" in its presence. We have a duty to perform when the National Association meets in that territory, and were there time to go back and trace from that germ, the law of '87, the consequences that have superabounded in this great Northwest, we might make a strong argument why Michigan should be well represented in this coming Association at St. Paul.

That we may further stir up your minds in this direction, I will introduce to you President Irwin Shepard, president of the State Normal School of Winona, Minnesota, who will address you.

PRESIDENT IRWIN SHEPARD, Winona, Minn.:

Mr. President, ladies and gentlemen—It gives me peculiar pleasure to be permitted to meet you this morning. It also stirs me to come to Michigan; and when I want to take steps toward the renewal of youth or the gaining of inspiration, I look back to the State of Michigan. This State is associated with the most precious and the dearest of all my treasures; for it was in this State that I gained my education and my wife. And I am always glad to come back; the old associations return strong and helpful. It is for this reason that, a week ago or more, in the meeting of the local board of the National Association in St. Paul, in furtherance of their plan to send representatives to the various State Associations in this holiday week, when it was asked, "Who will go to Michigan?" I quickly said, "Send me."

I am pleased to be the bearer of a more cordial invitation than I can express to you from the city of St. Paul and from the State of Minnesota entire, that all of you who are here assembled, and not you only, but all the teachers of the grand old State of Michigan, shall come and see us next summer and spend the summer with us.

In speaking of this meeting I do not wish to deal in commonplaces. If I tell you that it is to be the greatest and largest and best educational association ever assembled, that will depend upon what you and others like you make it. However, we have a certain selfish interest in that we want you and all the others, to bring with you that spirit of educational progress and helpfulness in all educational matters for which you are distinguished. In return, we hope to give you full draughts of the purest and freshest air you ever breathed, and to invite you to go with us to see our Minnehaha, Minneota, Minneiska, Minneotonka, and all the other Minnies with which we abound. The names are beautiful, but not half so beautiful as the things they name. To you who have not visited us, I speak particularly.

I sometimes hear people say, "Well, I have been to one great association, and I don't know that I like it so well as I do a smaller one; it is too large." I have heard people also speak that way of the Centennial Exposition at Philadelphia. What we are able to get out of an opportunity depends very much upon what we put into it. We will promise you that if you put something into that Association you will get something out of it. We expect to have better arrangements than at any previous Association in order that it shall not be an unorganized crowd, but though large in numbers, each one shall be able to find just what he wants.

I heard a little while ago, urged as an objection, "But the twin cities are not altogether happy in their relations, are they? Is it quite fortunate that the Association

should go to St. Paul? Is it true, as we have heard said, that there was a certain minister from the East who came and preached in a Minneapolis church during the summer vacation, and when he announced his text from St. Paul, all the Minneapolis people got up and left?" I said to him, "It is not true; it could not be true for the reason that there is not a man, woman or child in Minneapolis that does not know that there is not the slightest connection between the epistle of St. Paul and the city St. Paul." I will whisper you a secret: They are lovers, Paul and Minnie, and Paul has proposed; but Minnie is coy—perfectly willing to be a sister to Paul as long as she lived. There is a saying that all the world loves a lover; now no one loves a lover better than a school ma'am. So we ask the school ma'ams of Michigan to be the guests of our two lovers, and do not expect to find other than a loving and lovable atmosphere.

We want you to come not only to attend the Association, but to spend the summer. I think one of the best features of the Association has been its excursion feature; it has opened the way for thousands of teachers with slender purses to travel in our country and to spend a summer's vacation at some delightful health-giving and health-renewing resort. We have thousands of such places in Minnesota, limited only by the number of sky-tinted lakes that it has. I am told that now-a-days teachers cannot spend their vacation except where there is a summer school. I will say that we have plenty of summer schools there.

There are preparations being made for a series of excursions at the best rates ever offered, I think. Let me mention two or three: One excursion, which is pretty and attractive, is over the Northern Pacific and Manitoba roads to Butte, down to Salt Lake City, to the National Park; from Salt Lake City over the mountains to Colorado Springs, with facilities for camping and for spending the summer in what is the most beautiful part of the Rocky Mountains. Some may go to the Pacific coast; others north to Lake Superior. Special attention is being given to this feature, because the increasing number of teachers each year that travel over our country seem to demand it.

From my personal experience, I feel like advising every one to attend the National Association. The first meeting I ever attended was at Detroit, and I have attended every meeting since that except two. I have been greatly benefited thereby; nothing has given me more profit for the same amount of money and time expended than has the attendance upon these national meetings. Others will find it the same. The National Association is better organized now than formerly. The meeting at Nashville is admitted to be the best ever held. The published proceedings embodies a collection of the best educational literature extant.

Every detail for the St. Paul meeting is in the hands of competent men, and every arrangement will be made to accommodate, at reasonable rates, every one that comes. As to the value of the Association to you, I do not need to speak further.

I will mention one matter that really belongs to your State director. As a member of the committee on attendance and membership, I will say that we have devised a plan of previous organization. We have sent out about 10,000 blanks for the purpose of obtaining declarations of intention to attend the St. Paul meeting. For what reason? It is for the sake of the members of the Association as much as it is for the sake of aiding the local committee in handling the large numbers that come. As soon as we get information as to what the railroads will do for us, etc., we wish to send out to the persons who have signified their intention of attending the Association information in regard to rates, etc. All these names will be put on a special mailing list, and

as soon as publications are made they will be sent directly to these people. The railroads will be furnished with your names that they may keep you posted also. And as soon as your name is sent in you will be considered as one of our friends that wish to have all the information as soon as published.

I repeat our welcome to you, and trust that we shall see a large number from this State at the Teachers' Association at St. Paul.

SUPT. WELLINGTON :

According to a suggestion from President Canfield, we had arranged to give about thirty minutes to different gentlemen to contribute their mite upon this subject for a minute or two. Professor Hinsdale, of Ann Arbor, accepted a place upon this committee, and we had expected him to speak upon this subject at this time, but he unfortunately has to deliver an address to-day in Indiana, and was thus unable to be here. He promised, however, to send me a letter giving points why college men should attend the National Association, but it has not been received ; I will therefore call on Supt. Briggs, of Grand Haven, to address us.

SUPT. E. L. BRIGGS :

Mr. President, teachers of Michigan and friends—The National Educational Association is an institution in which it is the duty of every progressive teacher to be deeply interested. It is not an institution affecting one city, one state or one section, but one whose beneficent influences are permeating every section and state and school of the Union. Its membership is found in every state and territory ; its officers are men of national and international reputation. Its discussions are upon the most advanced educational topics that are forcing themselves upon the attention of the world, presented by men and women who are accredited with the highest authority, both because of intellectual endowment and special investigation in the line of work under consideration.

The National Educational Association has been progressive in all its tendencies, and it has been the great leader in the educational development of our nation during the past twenty years. Wherever a worker in any department of the field has been seized with a new idea or a special inspiration, the Association has caught it up, investigated it, sifted out the kernels of real worth and sent them forth to the production of a fruitful harvest wherever land would receive them. It led the public schools out of the bewilderment of the abstract, and into the clearer light of the objective methods of instruction. It has disseminated over the nation those seeds which have fructified in the higher development of music and art culture. The kindergarten and manual training have from the first held its platform by their most ardent advocates ; and it has been no insignificant factor in bringing the moral atmosphere of the schoolroom into the more clarified condition which it has been rapidly assuming.

The last meeting of the Association, at Nashville, gave many evidences of the progressive tendencies it is imparting to our educators throughout the land.

The discussion of "Denominational Schools" and of "Public and Parochial Schools" upon the same platform, during the same morning, by such men as Bishop Krane, of the Catholic University at Washington, and the ardent New Englander, Hon. Edwin D. Mead, of Boston, was a conspicuous illustration. No one who listened to that debate for the three hours of the morning session will ever forget the kindly spirit and eloquence of the Bishop, or the brilliant rhetoric and forceful utterance of the Bostonian. They inspired in us a higher ideal of the man, the educator, and the American

institution. Nor should mention be omitted of the fact that in that southern city, upon a public platform, the "Educational Progress of the Colored People of the South" was presented by a negro teacher from Mississippi.

These show emphatically the power of its influence in overcoming sectarian prejudice and sectional strife, and it is a great question whether any other national assemblage of the present year has realized so potent an influence in accomplishing either of these ends as the National Educational Association.

Michigan had, in point of members, a very meagre representation at the Nashville meeting. We tried to call the roll of our comrades, but scarcely a dozen responded, though the published minutes increased the list to twenty-nine.

After the seething, sweltering, sudorific experiences of Chicago two years previous, it is not strange that Michigan teachers were reluctant about trying the virtues of an interior city, several degrees further south, during the same month. But Chicago is given to outdoing the world, and she has proved that she can greatly surpass the South in point of heat during the same season of the year. Those who stayed at home from such considerations greatly underestimated Chicago's method of doing things. Nashville and the South greeted us with a genial atmosphere and a cordial hospitality which delighted the hearts of all who attended.

St. Paul has been designated as the Mecca of the pedagogue for next summer. If we can judge by past efforts of those in charge, the next meeting will be in advance of all its predecessors. The strongest educators of the country will discuss the most interesting and vital questions. It will lift the educational standard to a still higher altitude. Every teacher who can should catch the inspiration as it goes forth, not waiting for its transfusion through co-laborers or the public prints.

Michigan schools may be in the front rank, but they cannot afford to neglect this opportunity. With the present wonderful industrial progress, the schools must be kept in full sympathy.

"New occasions teach new duties ;
Time makes ancient good uncouth ;
He must upward still and onward,
Who would keep abreast of Truth."

A Michigan headquarters should be promptly located and efficiently organized, and every possible opportunity afforded to our teachers who attend to secure the richest benefits.

Fellow teachers, let us go up to the Twin Cities with a force which shall command the admiration of the assemblage for its strength. Let us catch the highest spirit which shall be brought to us from the best elements of our great nation ; and let us return to transfuse this progressive spirit with a thrill through all the schools of our State.

PRINCIPAL G. L. GORTON, Detroit :

Ladies and Gentlemen—The speakers who have preceded me have appealed very strongly to your minds and consciences. I will take the matter that lies next to these, that is the pocket-book. The natural question with an American is, "What is the expense?" President Shepherd stated that the railroads had not taken action in the matter of reduced rates. I wish to correct him. The Western States Passenger Agents' Association has agreed to make half rates on all roads west from Chicago. The Michigan Association has not yet taken action upon it ; but at their last meeting they said that they felt better toward the Teachers' Association than toward any other organization, from the fact that we never misused our tickets ; they had found very

few of our tickets at the brokers. And I think we can speak with authority and say that we shall have half rates in Michigan. We have reduced fare from Chicago and also from Milwaukee. The fare from Chicago is \$11.50 and from Milwaukee \$9.70. The fare from Detroit to Chicago and for those living in the extreme eastern side of the State, will probably be \$7.75 and the fare to Milwaukee about \$8.00. Going and returning by way of Chicago or Milwaukee would make the expense about \$18.00. The time from Chicago to St. Paul is eleven hours, and from Milwaukee seven and one-half hours. A great many have asked whether or not arrangements could be made to go by water to Duluth. I will say that the steamboat and the railroad men do not get along very well together, and do not like to divide up. But we are trying to make arrangements in the matter, and the subject is now before the Western State Passenger Agents Association. The steamboat men will make no positive statement, but the general passenger agent of the Lake Superior Transit Company has promised that they will give twenty-five per cent. reduction from any point to Duluth, which, they claim, is equal to half rates by railroad; there will be no reduction for stateroom and board. That would make the round trip \$30—the regular fare from southeastern points being \$20 one way, they making a reduction of twenty-five per cent. From Duluth to St. Paul the fare is about \$4.50 or \$5, making the whole expense about \$35 to go and return from Detroit. I think the other steamboat lines will make the same arrangement. Let me urge you to go.

I do not like to dishearten the teachers of Michigan, but at the Chicago association the number of delegates from Indiana were 441; from Ohio, 562; from Nebraska, 650; Illinois, 1,755; Iowa, 1,184; Kansas, 945; Massachusetts, 275; Minnesota, 680; Missouri, 630; Michigan, 272. Michigan had about one-half the number that attended from Ohio, one-third from Kansas; and Michigan, think of it, had even less than Massachusetts, when the Association was right in our adjoining State. I think, perhaps, the fault has been that you have not known about it; and, as President Shepherd has stated, this year you will be duly informed.

PRINCIPAL J. M. B. SILL:

The word that has been spoken by Mr. Gorton has been a word very fitly spoken; a very practical statement of what must come into the calculation of all of us who go; and I am very glad indeed to hear so clear and so excellent a statement of the matter of expense. I feel like saying all that I can to urge attendance at the next meeting of this Association. The recent ones have been poorly represented from Michigan. Perhaps there was some excuse, considering the distance and cost of going, for the small attendance in California. And at the last meeting, held at Nashville, no doubt a great many feared the effect of the climate; many who would willingly have gone hardly dared to go. But there is no reason why the attendance from Michigan should not be large at St. Paul. We go to one of the most delightful regions in the world for an outing in the summer, and it is not so far off that the expense is very great. We should, I think, resolve to go in large numbers. Let Michigan be represented there as she deserves to be. That they will give us a hearty welcome there, I have no doubt at all; and I think, too, that we welcome their representative here with great cordiality even bordering on familiarity, when we call him by his given name in the program.

PRIMARY READING.

MISS MAUDE BALL, GRAND RAPIDS.

We understand that the object of such an honorable assembly as we have the honor of addressing is the further advancement of education by deliberation upon the most progressive views that can be brought before us.

It has therefore been the aim of the writer to present for your consideration this afternoon not simply her own thoughts concerning this great theme, but ideas, views and experiences culled from the best authorities open to her access.

What subject in all the pedagogical curriculum is of more importance than this? An art in itself, as well as the key to all portals of knowledge.

How important then, that the foundation work in this mental structure be laid wisely! What blessing will be ours if we can assist the development of the child in a manner befitting its tender years?

Reading, we all understand, is the "act of acquiring thought or knowledge by means of the written or printed page. It may be silent or oral."

The aim is *thought*. Our best means for discerning this is in the pupil's ability to give vocal expression to his understanding. Much time must be spent in pure mechanical drill, since he who is capable of giving proper inflection, correct accent, etc., must of necessity have a keener appreciation of the beauty and thought of the text, than one who is unable to do this.

The oft repeated maxim, "From the known to the unknown," must guide and direct us. Study it in the morning, before commencing the day's work, keep it in mind while performing the labor, and question ourselves at night upon our faithfulness in carrying it out.

Our questions then:

What the known? What the unknown?

The majority of children enter school at the age of five and one-half years. In a paper on "Methods of teaching Reading in the Primary Schools," published by the Board of Supervisors for the Public Schools of Boston, we find this summary of the child's knowledge:

1. He has a certain range of ideas which have come to his mind through the senses.
2. He has all these ideas related in various ways; that is, he has thoughts.
3. His ideas are associated with spoken words; and the association is so strong that the word readily recalls the idea, and the idea, the word.
4. The relations of ideas with one another have been associated with certain definite forms of expression (idioms) which are, in general, co-extensive with his power of thinking.

5. He has learned to express thought by imitating the spoken words and idioms he has heard others around him use; that is, he has learned to talk.

Up to the time of entering school, the child's method of learning the use of language has been natural and easy. It consisted, first, in associating spoken words, heard by him, with certain ideas in his mind; and, secondly, in imitating spoken words and idioms until he could use them in speech. This suggests, very distinctly, the course to be pursued after he has entered school. In learning to read, he has merely to learn to use written or printed words for the same purpose as that for which he has already learned to use spoken words.

He will first associate the written or printed words which he sees with the corresponding ideas in his mind; and, secondly, he will imitate written words (copy them with the pencil) until he can use them to express his ideas and thoughts.

As to the unknown, we are all familiar with the new field of thought that opens before the pupil, on entering the Grammar Department.

Having reached the age when the reasoning and questioning faculties are developing, he must possess the ability to gather thought rapidly.

Text-books are open to him now; and sole dependence upon his teacher for oral instruction does not satisfy.

To be able to acquire this knowledge he must learn:

1. Many words whose meaning he knows.
2. Words whose ideas are new.
3. He must learn how to use the dictionary.
4. The child *by this time* must have a taste for good reading.

This, then, is a conclusive fact: That teaching that best enables the child to associate the idea with the word is the true teaching.

Models, pictures, blackboard sketches, stories concerning familiar things will help to quicken thought in the absence of objects themselves. For the first five months the child requires great stimulus for this association of the written word with the spoken word and object.

After that the child's interest in the written words will gradually awaken so we need use these aids less and less, until the last two years of primary work, when they can be dispensed with entirely.

At the end of five months, or what is generally known as the beginning of first grade work, he has acquired a knowledge of at least 100 words, placed in as many different forms to show different ideas as possible.

This number, we believe, is universally considered the limit of the average ability to master.

Can it be possible that we are giving too meagre measures in our anxiety to answer "not guilty" to the charge of cramming?

In the New England Journal of Education published January 31, 1889, appeared an editorial entitled "How they read in Chelsea, Mass., E. H. Davis, superintendent."

Doubtless the majority of my hearers have read the above mentioned article, but to bring it before you more forcibly we quote at length from its pages:

For the first week of ten lessons, of fifteen minutes each, the work is purely conversational. With objects in hand, they learn to make such statements as these;
1st day.

I have a horse.

You have a horse.

We have a horse.

Same with cow and cat.

They have a horse.

He has a horse.

She has a horse.

2d day.

It is *my* horse.

It is *your* horse.

It is *his* horse.

It is *her* horse.

It is *our* horse.

It is *their* horse.

The same with other objects.

3d day.

They observe the parts of these animals such as :

The cow has two horns.

The cow has two eyes.

The cow has two ears, etc.

4th day.

They are led to tell all about what these animals do, or can do.

The cat eats *meat*.

The cat can *play*.

The cat *runs*.

The cat *bites*.

“By the fifth day,” the article says, “they are wide awake, thoroughly at home in their talk, and ready for reading from the board what the teacher writes in script.”

She then returns to the horse of the first day. In response to a question the child says, “I have a horse.” The teacher writes it on the board, merely saying, I have written what Johnny said. (Poor, dear Johnny! Truly, “thy name is Legion”!) Each child then reads it in turn. She then gives other toys, and one says, “I have a cow,” another, “I have a cat,” and she writes each statement under the last, and they all read each. Then each child points to what the others have said.

Sufficient has been given to illustrate the method used. It was to this statement we wish your attention called :

In *eight* weeks they know perfectly well these fifty words:

Horse, cat, cow, dog, etc.

Have, sees, has, is, etc.

A, an, the, red, fat, etc.

I, it, my, me, you.

Yes, no, not, in.

To this list they add, in the third month, 76 words; fourth month, 85 words; fifth month, 80 words; and some 15 proper names, making a total vocabulary of some 800 words in one-half year.

From four to eight words are taught in a day. In one lesson the new words used were boat, fish, swim, and papa.

These sentences were written :

The *boat* is on the water.

The *fish* is in the water.

The *fish* can *swim* in the water.

My *papa* has a new boat.

At the beginning of the fifth month they are given books, when they read the first

half of fifteen First Readers. In second year, the latter half of same books. In third year, they read many Third Readers.

We will find no difficulty in developing this number of words; but will the child retain them in his memory?

It is unquestionably true, that while we should teach words slowly and carefully, too much drill on the same words, though difficult, may make a child dull, when a new word would brighten his entire horizon.

As a progressive body, we ask you to consider it well.

In giving lessons there should be two parts:

1. Sentences of story in which each new word is taught.
2. Rapid drill on difficult words.

In each, study for variety.

Of the manner of the first, we have spoken. But we reiterate: The word is not learned until its sight immediately recalls the association.

The second may be given in various ways:

- (a) Long used hunting exercise.
- (b) Two using pointers. See who can find the word first.
- (c) Allow them to select an object or picture from large group, and find the written word on the board.
- (d) Writing questions for them to read silently, and answer orally.
- (e) Have pupils read sentences rapidly written on the board. (If pupils do this with fluency, we may know our work has been well done.)
- (f) Write sentences on slips of paper for them to read.
- (g) Write story on paper, cutting it into slips. Call for them by numbers placed upon them.

These are only a few of the many devices that a wide-awake teacher will strive to make innumerable.

The change from script to print can be made at this time with little difficulty.

To illustrate:

- (a) Place a word in script and print side by side.
- (b) Place printed word in many places for children to find.
- (c) Put phrases in script and print on the board:

a cat my cat the cat

a cat my cat the cat

Call attention of children to similarity and illustrate by connecting printed letters:

a cat a cat

- (d) Write sentences in script and print:

Do you see my cat?

Do you see my cat?

(What a warm corner dear old tabby deserves, if for nothing more than the number of children she has launched forth on the sea of knowledge!)

- (e) Print a short story, write the same on board for comparison.

(f) Develop carefully, and drill on all new words in the morning, that are to be read from books in afternoon of the same or following day.

Phonic Analysis may be introduced, too, at this stage in the work.

By this, we mean to assist those who have defective articulation by special drill, showing them the correct position of vocal organs.

Commence with a *regularly* formed word, such as *man*. Have it pro-

nounced slowly and more slowly until they see that it is composed of distinct sounds.

Let me urge that we guard against a premature use of diacritical marks, since it is apt to lead children to a blind calling of words without meaning being comprehended.

In reading from books, strive to give enough variety in subject matter, so that the lessons do not degenerate into mere memory exercises.

We secure variety by using the first half of many readers, as previously suggested.

Do we need to speak of reproduction? Since our aim is thought, we *must* call for reproduction.

1st. Orally.

2d. Written.

Let the pencil ever go hand in hand with your work. It is said to be the best test of knowledge to be able to write it.

In testing from books:

1. Use matter that the child has never seen.

2. Test for thought.

3. Test for manner of delivery.

As to Readers, there seems to be enlarging to powerful proportions the idea of giving children even in the Primary Grade a knowledge of and a desire for the best literature the world possesses.

We see no reason why students of music should have the privilege of acquiring the love of the classical in that art, while the students in our public schools are giving days, weeks and years upon mixed reading.

In an article on reading, published by G. Stanley Hall, of Johns Hopkins University, he says:

"I am profoundly convinced that just as from the point of view that regards charity as a science rather than a virtue, it is wrong to give doles to beggars unless we are able and willing, personally or by agencies, to that end, to follow them up and see that our gifts are so spent as to do the recipient good and not harm, so the school has no right to teach how to read, without doing much more than it does now to direct the taste and confirm the habit of reading what is good rather than what is bad."

Hoping that the new year may find each one of us filled with a new desire and fixed determination to lead the child by means of his reading to a nobler, higher plane of life, we leave the subject for your discussion.

GENERAL DISCUSSION.

SUPT. CLIZBE, Ionia :

I would like to ask a question : The suggestions of the paper were that something like 800 words might be accomplished in five months' time, but I did not hear any suggestions as to how those words would be taught except in the first few weeks. Do you pursue the same method right along? Is that the method by which all the words should be taught?

MISS BALL :

From this article I should suppose so, though nothing is said of the method except for the first five months.

PROF. MILLER :

Do I understand by the paper that she would have the script precede the printing ?

MISS BALL :

Yes, sir, I should. I should say use the script at first and the printing after the first five months' work.

SUPT. BRIGGS, Grand Haven :

Mr. President—I do not feel at all prepared to open this discussion, because I have not given thought to the discussions of it ; but I have been very much interested in it, and have been especially interested in the thought that has been presented with reference to the methods in the Chelsea schools. I would like to ask, if there are primary teachers here who have taken the matter into consideration, how many words they have been able to teach in five months ? At the time that article was published, we began to make a little test in the first few months of school in teaching script words on the blackboard, and we found we came considerably short of the goal reached by Mr. Davis. I presume our work probably is not as strong as in many other schools. And I would like to hear from the teachers as to whether they have succeeded in reaching that number of words in the stated length of time, and whether the teaching has been satisfactory or not ; whether they have so taught the words that they have become a permanent part of the child's knowledge, or whether they have just mastered them for the time.

SUPT. HAMMOND, Charlotte :

We are trying to follow, essentially, the plan of Prof. Davis. We shall not be able this year, however, to cover the number of words he has given ; I think we shall, however, master pretty thoroughly 200 of those words in five months. We give no print whatever until after the first five months.

SUPT. C. N. KENDALL, Jackson :

I don't know that I have anything to add to the discussion of this very interesting paper which we have heard ; I may say, however, that I am very glad that this subject of primary reading has been brought before the Association. I believe, Mr. President, that this Association could very profitably spend an entire half day's session in the discussion of this most important subject. As to the number of words which a primary child may be taught during the first few months, or during the first few years, I do not know that I can say anything definitely, but it seems to me, Mr. President, that the number of words which Superintendent Davis, of Chelsea, lays down in that paper in regard to the work in his schools, is a pretty large number of words for the average teacher to teach so that they can be impressed upon the child's mind so he will retain them. I think it would be an exceptional teacher that could do it. It seems to me that if you teach a child 400 words during the entire year, you have done a pretty good year's work. But I would say that I believe the matter of teaching children new words by means of phonetics is worthy our consideration. It seems to me words like fish, wish, dish, may be well taught phonetically from the beginning. I believe we could teach children more words and have them make more permanent impression upon their minds if we commenced this teaching of phonetics from the first.

I would like to emphasize what Miss Ball says about doing a large amount of reading during the first part of the year and, indeed, during the entire year's course. I think the more reading matter we can give to these children, the more practice we can give them in reading, the more permanently the words will become fixed in their minds,

not only in form but in connection with the ideas for which they stand. If we could put primary children through several readers the first year, we would have very much better readers after the first course.

SUPT. HAMMOND :

I do not understand that this plan contemplates more than 300 words; the minimum is 100 and the maximum 300 in five months, as I understand it. He says only the brightest scholars can master 300 words in five months. I believe with Superintendent Kendall that the teaching of the simpler sounds can be begun very early in the first grade, and my experience has been that the pupils take hold of this work much more readily at this stage than if introduced in a higher grade.

PROF. SHEPARD:

I was pleased with the paper and with some points raised in the discussion. It is certainly an important question. We have experimented with this method, made tests, and tried various methods, but we have not found the right method yet and I don't know that we ever will. We make progress along certain lines, and then find something better and try that. But in all of our experimenting, however, we have swung back very decidedly from the method suggested of beginning with script, and are in favor of the old time method of reading from the printed page and from that alone. Believing that there is something of true philosophy in the saying that it is difficult for a child to learn his reading vocabulary in script form and then change to the printed form and do so readily, that ever afterward the script word will embarrass him or stand as a cloud between him and the thought. A boy stumbles in reading, the teacher steps to the blackboard and writes the word in script and he recognizes it immediately. This shows that the picture of the script form is more familiar than the printed form.

One other thing: It does not seem to me that it is very important whether a child learns 200 or 500 words in five months, compared with the question of how much power he has gained to make out new words for himself. The question of what the vocabulary is, is more important than the number of words it contains. The "rat-cat" vocabulary is not one which he will use largely in his reading, outside of his class exercises. I have found great aid in using certain features of phonetics, not following any particular line of phonics, but taking a small number of the easiest group pronounceable and learning to recognize the group and sound it, thus learning to readily pronounce a new word.

Another method, if it be dignified by that name, we have used, represented in one line of readers, viz., the Stickney Readers. We have made careful tests in this kind of reading; taking for instance, the story of the House that Jack Built. I never was more upset in all my philosophy of teaching reading than in taking a class and teaching them this story; the zeal of the children in learning to read the story, carried them over all the difficulties. And in taking the couplets which they had known from their earliest childhood, or taking the Song of the Brook, the teacher reading part and the children reading part, we have been very successful.

So we do not confine ourselves to any one method. We try to guard our teachers against relying upon the method of learning to read by the use of script. We first, last and all the time, keep closely to the printed page.

PRINCIPAL SILL:

Mr. Chairman: I was very greatly interested in the paper read; I regard it as a most excellent one, one of the best I have heard in this association. But the same thought

as the one expressed by the last gentleman, occurred to me: I should not regard it as a great triumph if the child did accomplish 800 words in five months if he did not gain the power to distinguish new words. I should not think the work had paid; I should think the loss greater than the gain if merely a large vocabulary were acquired in that time, and yet other words, outside of that vocabulary would be new to him and he would be unable to read them; I should not think that a great triumph. There are a great many words that have analogies which, as soon as pointed out to the child, enable him to distinguish a whole catalogue of words.

But the statement that a child can learn 800 or 500 words in five months is no surprise to me at all. It is perfectly marvelous to me, the rapidity with which a child will learn new things. We have to think that when a child is learning how to spell a thing, the word itself is just as strange to it as the spelling; it is just as new to it to find that a certain animal is called "cat," as it is to find that cat is spelled c-a-t. Those who have watched children, even in the course of a little visit merely, have seen that the child's mind is wonderfully active; it will learn a number of things in an incredibly short space of time. Now if we can only get hold of the right end of the string, it will not surprise me if a child can learn a thousand words in five months.

SUPT. HAMMOND:

I would like to inquire about acquiring the power of learning new words. Now how shall we teach so that they will have the power to learn new words themselves, without teaching them the new words?

Another thing: If I understand the meaning of one remark about using couplets or certain selections of poetry which would carry them through all difficulties, I think there is danger there of their reading from memory and not depending on the printed words. I know an instance of a little child who can recite quite a little poem in this way; she would recite anything she heard, and for a time it was supposed she was reading [it and doing remarkably well; but it was soon found that she merely remembered what she heard. I would like to have some light on the question of how children shall be taught to learn new words without teaching them the new words themselves.

PROF. GEORGE:

I noticed that in the paper this point was not brought out as was alluded to by Professors Shepard and Sill and Superintendent Kendall, namely, making the child self-helpful. The subject of primary reading resolves itself, if we will study it a little, into two distinct problems: One is a very easy one to solve—to teach children to recognize a word at sight. Put the printed or written word on the board, have them say it over two or three times, and they will recognize it at sight. But in this process you have not made the child self-helpful. If he is never going to meet any words except those you have taught him to know at sight, well and good. I understand the Chinese teach in this way; they have just one character for each word, and every word has its character, and the children are taught to recognize these characters. But we have an alphabet; we can analyze words into phonic elements, and use these in turn as elements of new words.

Now the solution of the second problem—to teach children to make out new words for themselves—is easy. There are analogies, and these analogies must be made use of. If we teach such words as rat, cat, mat, and then ran, can, man, and then show how the initial consonants of one group unite with the terminal combination of the other group, we indicate the solution of this second problem. Go on in this way, making an

application of various analogies, and thus the child will see how the letters and elementary sounds may be made use of, and he will be able to make out new words for himself.

I do not think Professor Sill made too high an estimate when he said that a child might be taught to recognize one thousand words at sight in a year. But there is no object in teaching a child to recognize this number of words, if he is not able to make out new words for himself. We would better get him to combine sounds of words that are in his spoken vocabulary but not in his written vocabulary, and thus bring his written and spoken vocabularies together.

PRINCIPAL SILL :

I have been greatly surprised in trials and experiments I have made in this line, to find that children taught vocabularies were simply taught to recognize the words at sight. They could not read words outside of the vocabulary taught. I thought analogies would carry them over this difficulty into the recognition of new words, and it will in some degree; but I have been greatly surprised to find how little they learn outside of the words taught. I have been surprised to find a child would blunder on the simplest word; for instance, he could not pronounce *bat*, although he could call *mat*, *cat*, etc., at sight; but I have found often that they had not gone beyond the vocabulary taught them. There is such a thing as going too far in learning words at sight. They should learn to make out new words by themselves. We do not know all the words in the language by sight, but we have in our minds a law that governs all words, and we have no difficulty in finding out what a strange word is.

MRS. D. E. WOOD :

My brethren and sisters: If you will disabuse your minds of the fact that I am employed to teach a certain system, I am willing to speak to you; but remember that I am a member of the association with you, and as a teacher I am willing to speak on this subject.

The difficulty with the ordinary phonic method is that the child cannot distinguish between sounds of the same letter in words. It cannot tell, when you say "man," whether it should be *mān* or *mǎn*. Phonic analysis is a slow pronunciation of the word. It does not assist in learning new words, but it is a fact that if you know certain laws of the language as regards words, they will help you out directly. Now your little folks in music learn wonderfully well; you all know what they do in learning music themselves. First you sing for them; they learn songs by rote. But when the little folks want to sing for themselves, what shall they do? It is a fact that the tone is determined by its place on the staff; its length determined by the dot. Music is somewhat an art and somewhat a science. Reading is most essentially an art, and there are certain plans we must pursue to acquire it. The elements of the English language are about 40; of words we have about 118,000 in the dictionary. Shall we go on through time throwing all those words into the face of the child as we throw snowballs at a snow man, letting those stick that will, or shall we make the child independent in its reading by giving it the law of reading? Now you know, as well as I, when you come to think about it, that we do classify the words of the English language; we have words belonging to certain families, let the little folks learn the families; they will learn them easily. Teach them to always take the vowel short when the monosyllable ends in a consonant, and you have taught the law of the word of six syllables; if that word end in a vowel the vowel is long. Teach these elements of the language by a continued story. Let them learn them in the sound of the waves, the sounds of machinery; they all know the various sounds in nature—you know how

easily they take them. You know how all the words are arranged in families, and when you remember that it is the terminating consonants of syllables that determine the sound, you have it all in a nutshell.

SUPT. PLOWMAN, White Pigeon :

I don't know that I have very much to say, further than this: I have been unfortunate enough to remain in one place so long that I have had the displeasure of reaping the harvests of my own sowing. My advice to the younger class of teachers who are present this afternoon, is this: That unless we can discover, right here this afternoon, just the best way to teach primary reading, that you don't stay more than five years in the same place; if we can discover just the right way, then stay as long as the good people will let you stay.

We began by teaching the word method; we did not teach it very correctly, however. We only taught it in part, but very much as others taught it at that time.

Not long since, I was astonished to find that in the high school we had pupils that were powerless to handle words which they had not met before. Then the past rose up before me, and I remembered how we used to study syllabication, and I remembered that that kind of study gave to us the power to recognize and study out new words. Pupils of to-day do not have that faculty. And I begin to discover, fellow workers, that some one has lived before we lived, and that some one has known something about teaching before we discovered it, and I am honest in my convictions to-day that if we were to go right back to the old Webster Spelling Book, and learn the letters one by one and the sounds which they represent, and learn to spell very much as we used to learn to spell, and learn to read very much as we used to learn to read, we would have better results than we have at present with our so-called improved theory. This may seem antiquated, it may seem old foggy, but I believe that it is so, that the correct method is to learn to recognize the letter as it is marked and then learn to use the letter as it is marked to form syllables in the formation of words. This gives the pupil power to create and use new words.

MISS VANDERWALKER, of the State Normal School, Ypsilanti :

One point seems to me quite important to consider—that is the relation between the intaking and the outgiving process. It seems to me that this bears upon most of the work that can be done; everything, in teaching, depends upon the conditions: A capable and experienced teacher with bright pupils, and few of them, can do better than one with a large number of pupils not so bright. But taking everything into consideration, the aim and object of primary education is development. Now, is simply teaching reading sufficient? The point I wish to make is this: Suppose we are merely told about a thing, but do not do it ourselves, we cannot remember it so well; suppose a boy is told how to make a box, he thinks he understands it, and says, "Oh, yes, he knows how to make it," but when he comes to the actual making, he finds he cannot remember just how to do it; but after he has once made it and knows just how the different pieces go together, he will not forget it. Now if a child makes the word, if he writes it himself, he can remember it better because the action of the hand helps to concentrate his mind on the form of the word. Of late I have almost come to the conclusion that the child should learn words not very much faster than he can write them. His oral expression will go hand in hand with the impression or taking in of knowledge, which is true education as I understand it. Suppose a child learns in one or two weeks several words; he learns to write them; he can use all of those words in sentences, can write them all; he has, in my opinion, a much better foundation for future work than if he had learned 500 words and learned to recognize them at sight only.

SUPT. HAMMOND :

Of the number of words which the child is supposed to learn in five months, should they be common words?

SUPT. CLIZBE :

I should say yes. I always say so.

I am sorry that I am obliged to make a confession—still it is good for the soul. I am sorry in the first place that I am a teacher, not because I don't like the business, but because there are so many mistakes hedging me about that I am ashamed. We wheel about so from one thing to the other that there is not a single method that has actually had a fair, steady trial. To-day we have heard something of the Chelsea method as if it was a new thing; it is not a new thing at all; it is a mixture of old things. I can point you to several schools in this State that have used all the points that are in the Chelsea method for some years, as I understand it. The method of using script entirely in advance of print is nothing new; it is, however, too much used, I am afraid. My opinion is something with Mr. Plowman's, that we discard too many of the old tried methods and take on these new uncertain ones. We do not try any one method long enough to know whether it is good or not. The method in the schools of Ionia is as follows: The first two or three weeks are spent largely in conversing upon some ordinary subjects; the teacher may print some particular words on the board; perhaps put some in script; but a very few words constitute the body-work for the first few weeks. The phonetic system is closely adhered to. After a few words are learned as wholes, they are separated into elementary sounds. These sounds are detected in new words until the child gains the power to sound certain new words at sight. At first the most common consonants only and the short and long vowels are treated in this manner, but the list is gradually increased until by the use of diacritical marks, nearly all of the sounds of the language are known. With this power acquired, the acquisition of new words is an easy matter.

We have what we call our kindergarten grade, which is five months long; then the *B 1st* grade, five months long; then the *A 1st*, five months long. The kindergarten work is as I suggested above, and, in addition to the board work supplied by the teacher, it has nothing but charts. *B 1st* reads the first half of two readers; *A 1st* takes up the first half of another First Reader, and then completes the last halves of the three. I may say that in our schools at the present time, the *A 1st* classes have already completed the chart work of 300 words, three First Readers, and still have one month to spend in reading supplementary leaflets.

The reason why the phonic method is not used more profitably in our schools generally is, I am afraid, because the teachers do not understand it thoroughly. So many teachers using this method cannot themselves give the proper sounds of the letters, cannot sound the letters *g*, *r*, or the short sounds of *a*, *o*, *i*, etc. Until our ability in these fundamental elements shall stand a critical test, the phonic method will fail. Because it has not been used understandingly, we are drifting out of its use entirely and adopting newer methods of less real merit.

MRS. E. D. WOOD :

I would like to ask a question and have the teachers think about it. I know there is no difficulty in the first and second grades with the children reading aloud, but how is it with pupils in the fourth grade? Is it a fact that very many of our city and village boys in the third and fourth grades dread the reading so much that they drop out of school entirely?

FORM STUDY IN THE PRIMARY SCHOOL.

MISS LILLIAN CRAWFORD, MICHIGAN STATE NORMAL SCHOOL.

"The fundamental conditions of mental activity," according to Pestalozzi, "are form, number and words." Number and words have occupied an important place in the curriculum of all schools from time immemorial. The study of form has, until a comparatively recent period, been considered the province of geometers and artists.

With the growing appreciation of educational principles, as formulated by Pestalozzi, has come the recognition of the fact that form is no less potent, as an instrumentality in the hand of the skillful teacher, in the development of the child, than either of the other two. As a result of this has come the general introduction of drawing into schools of the country, and the demand for manual training. Until, however, the study of drawing becomes a study of objects, instead of their flat representation merely, and, until drawing so taught shall become a part of the work of every school and of every grade, *form*, as an educational factor, has not been given the prominence to which its importance entitles it.

It is not from the standpoint of a professional in the work of teaching form, nor yet from that of an artist, that this paper is written and presented, but from the standpoint of the primary teacher, with whom the reform, in this respect, must begin. No originality as to means and methods proposed is claimed, but the thoughts presented are the result of study, observation and some experience.

As a subject it is no novelty. Several of the larger city schools of our State are already doing a fine work in this branch, under the direction of special teachers. The introduction of form study is thus established, and the question now becomes one of ways and means for extending it to the schools of every city and village in Michigan. The subject before us for consideration has received more or less attention in eastern cities, and, as a department, is to occupy a prominent place on the program of the Summer School at Saratoga in July. Prof. Spring, whose reputation in art, especially in clay modeling, is national, says, in a recent letter to me, "We are just on the eve of a great interest in Form Study, and there will soon be many useful books about it."

To ward off opposition from the now overburdened primary teacher, we would say that this subject is not to be *added*, in the general acceptance of the term, to the existing curriculum, but should take the place of much

that we have tried to do in the first grade, unsystematically and unscientifically, and consequently without results.

Having once given it a place in this way, it should go hand in hand with the other primary school studies. It should occupy such a place as to lay a better foundation for future knowledge, should so prepare the way that the acquisition of all knowledge will be easier, pleasanter and more systematic. It should stimulate observation, give knowledge of form and attributes of objects in nature and in art, with a systematic classification of the same. It should train the memory and judgment and give skill to the hand. Great as the possibilities of this study are, its elements lie within the reach of all. Some systematic beginning may be made by every teacher, not, however, without effort and expenditure of time, strength, and money. But will it not pay, and can we afford to be behind with recognized best things? And the way to begin, is to begin.

Our so-called "methods of development" have many times been simply the old "pouring in" process in new dress, and in slightly modified form. In spite of this general system, children have accumulated a degree of intelligence, and what we proudly point to as great results, have been achieved. Have these been the product of a systematic development of the *whole* child, or of some special faculties receiving attention at the expense of and to the total neglect of others? The "old education" is rapidly retreating under repeated attacks. The reaction is upon us. Manual work and manual training are the cries on every side.

The legitimate place of form study in the primary school seems clearly to be that of connecting link between the kindergarten and the manual training school, a continuation of the spirit of the kindergarten, where the study of form is a prominent feature, and the training of the hand receives attention—a preparation for the manual training school or for scientific pursuits. It seems that these three may form one grand whole, each fitted to take charge of the real development of the child's faculties, one and all, at successive periods of school life. At the outset, we are brought face to face with the fact that kindergartens are not universal, and manual training schools are few. Then just so much more devolves on the primary schools. The kindergarten and the manual training school you may not have, but the primary school "ye have always with you."

Dr. Butler says: "I sometimes fear that the attractiveness and value of the manual training school for boys, of high school age, may blind the eyes of teachers and others to the fact that the primary work is far more important. Of every six boys that enter the primary school, only one, on the average, reaches the high school. Are the other five boys to have no manual training, no training of their powers to express their thoughts by drawing and construction, no training of the judgment and executive faculty in the exercise of the will, on which so much depend?" According to Froebel, "there is at first no perceptible development except in the child's physical organs, which are the instrument of the spirit. Early education must, therefore, deal directly with the physical and influence the spiritual development through the senses."

We would have no child in ignorance of the long recognized elementary branches; and yet can we less culpably neglect the training of the eye and the hand, especially when facility with these is scarcely ever lost, and enters so much into practical life? It has been shown by an English educator that

“upon the development of the motor centers of the brain depends the power of skillful muscular exercise; and that this, in its turn, has a most significant relation to the growth and development of these centers. * * * The development period of the hand centers is not accurately measured off, * * * but there can be but little doubt that its most active epoch is from the fourth to the fifteenth year.”

To get best results, form study and connected hand-training should have a place on the program of each day. With success in making—creating—comes a sense of power, which, while encouraging to higher attainments, adds a dignity to the life which will not be overestimated. These ideas are by no means new. Lord Bacon taught that “education is a just and legitimate familiarity between the mind and things.”

Educators are becoming more and more convinced that the study of things, not words to represent things, is the true work for children. Indeed, we may say that since words should represent ideas, and child ideas are ideas of things, a knowledge of things is necessary to the correct and accurate use of words. Object teaching is the basis, alike to a certain extent, in the kindergarten and primary school. Manual training is begun in the kindergarten. Shall the skill there acquired be allowed to fall into desuetude in the primary school? To be sure, we have here a manual training with the use of the pencil in writing; but this prepares only for professional and mercantile life. Can we not, by judicious, wide use of Form Study, united with the foregoing, lay the foundation for scientific knowledge and skill in the so-called industrial pursuits? Let us see.

What shall Form Study include? The study of forms, fundamental and derived in nature and art. How? By the use of models, through senses of sight and touch, beginning always with the concrete, perfect type forms, proceeding to abstract from these knowledge of form, quality, color and number. From type forms we proceed to modified forms; and here we have all the world for our field. Percepts thus formed shall bear fruit in reproduction, recreation of the forms studied. Why? The first activity of the mind of the young child is that of the faculty of perception. The percept is never complete till sight and touch have done their united work. Then the evidence of correct percept is reproduction. The tongue is one instrument of expression, the written symbol another, but more potent and a universal language is that of drawing, or making again the object in solid form.

Form Study, as it may be pursued, lays the foundation for, and habit of study which will be valuable always. Under wise guidance the child unconsciously falls into habits of contrasting, comparing, classifying. New facts are connected to old facts and thus become knowledge to the child. Too many of the facts taught in school are isolated and do not form knowledge; they need to be co-ordinated with other facts. Education should be one connected whole, advancing in systematic and continuous growth. The possible way to accomplish this in form study we hope, at least, to give hint of, in what follows.

If the child has not received kindergarten instruction, we would not, when he first enters school, introduce him to words. Our conventional first word, *cat*, has about passed off the stage. Let any and all written words go with it until the child knows completely the thing. If the spoken word were a thing the child could see and handle, he might possibly, with a slight

degree of wisdom, be asked to grasp the pencil and try to make the written word, i. e., the word's picture. Since the written word represents the intangible spoken word, let it go until a want for it is experienced by the child himself, when he will probably have secured command of his eye and hand, and have sufficient mental and physical development to execute easily and well. One of the first laws of life is activity. Every child must and will have something to busy himself about. If he has not wise guidance in selecting good and profitable things, he will select for himself with the possibility of finding things wrong and injurious. With activity, in which efforts put forth are attended by success, comes efficiency of the hand which has a direct influence on life efficiency and a reflex influence on the head and heart. Then great care should be taken to give the child things to do at first which are simple enough for his ability. "Learn to do by doing," is a trite educational precept of the day, for which Comenius gave us the key-note, so long ago, when he said, "Let those things which have to be done, be learnt by doing them."

What forms shall we first bring the child to study? As Form Study is to follow, as nearly as may be, the Froebelian idea, as shown in the kindergarten, and as much—indeed, most of the material for this study may best come from kindergarten supplies—can we do better than present the forms in the order arranged by Froebel? Again, as it is avowedly the study of Froebel's works that awakened in the mind of Cygnaeus, the father of the manual training school, the germ of the idea which took definite shape in that school as we now know it, it is eminently consistent that the same line of thought and work should run through all three—the kindergarten, the primary school and the manual training school.

When a young man, studying some of the natural sciences, Froebel was struck by the constant recurrence of certain forms. From these he selected three—the sphere, the cube and the cylinder—as fundamental. These, in models, we will present to the child for first study. While in the kindergarten the colored balls of the first gift are first presented to the child's notice, we may in the primary school begin with the wooden sphere of the second gift. However, even here the use of the first gift makes a pleasant and easy introduction to form study, combining the attractions of color and of form. When studying the perfect sphere we shall do well to follow Froebel's Law of Contrasts and present the cube. By senses of sight and touch, a knowledge of form, surface, mobility, etc., will be acquired. This knowledge is to be perfected, made definite and retainable, in the making of the form by the child himself.

Let the sphere be made first. For this act of recreating we should put into the child's hands the substance which will most readily do his bidding. Porcelain clay is recognized as the best material. Its use in modeling is not as difficult or disagreeable as is popularly supposed. It comes in the shape of bars or bricks, and may be procured from potteries or kindergarten supply stores. This clay is made ready for use by putting it into a common stone jar and pouring upon it all the water it will absorb. Just before giving the lesson with it, the clay may be put into a strong cloth and pounded or kneaded until at the consistency of soft dough, after which it may be cut into pieces of convenient size for the children to use. Although molding boards and wooden molding knives are considered desirable in this work, neither is indispensable. Pieces of heavy manilla paper laid on the desk or

the child's own slate are good substitutes for molding boards, and the fingers and slate pencil are the only necessary tools.

At lesson time each child should be given a sufficient quantity of clay to enable him to make a form of the same size as his model, which should be before him while he works. In making the sphere the palm of the left hand should be flattened, and on it, with the right hand, the clay should be gently rolled. It is recommended by some that in this process the sense of touch should be the sole guide in ascertaining when the clay is in as nearly a spherical form as possible. Theoretically this may be possible; but I fancy the children who could be kept from looking at their work would be the exception and would be under unusual discipline. As the eye and hand worked together in gaining the percept of the form, why should they not so work in the reproduction?

There is no occupation connected with Form Study which so holds the attention as does the use of clay. In this the child is as happy as one could wish. He is absorbed in his task and heeds nothing else. The time and pressure required in making this imitation of his model, serve to impress the exact nature of its form.

At the close of this lesson the teacher, with a strong thread, may cut from one sphere the half-section, the hemisphere; also the embodied plane, the circle. A few of the best forms made by the children, in all clay lessons, should be saved, while the others are put back into the jar and prepared for use at the next lesson. After the pieces preserved are thoroughly dry, they may be colored with paints or pencils.

Children will take even more interest in modeling life forms than in recreating the model studied. Those based on the sphere, hemisphere and circle may include marbles, nuts, fruits, with their half-sections and leaves and flowers, as well as various utensils and works of art. By cutting the circular plane from the sphere, we have given the idea that the circle represents the surface of the sphere. The laying of tablets, pasting of parquetry and the use of the folding paper are all valuable and give variety to the work. The more ways we can illustrate a truth, the stronger and more lasting will be the impression made on the child's mind. Ring laying, to represent the curved line bounding the circle, may now follow. To supplement this, we have the pasting of paper rings and half rings, which have recently been added to the kindergarten supply lists. One step farther and we reach the limit of geometric abstraction, the point; and illustrate this in the occupation of perforating. We have thus systematically proceeded in a simple manner from the solid to the point.

In the process of reconstructing we have the occupations of sewing the outline, followed by coloring the enclosed surface. Card-board modeling, in connection with all forms excepting the sphere and derived forms, brings us to the representation in hollow form, of the original solid.

Following the study of the sphere we would have that of its opposite, the cube, and next we would take their mediating form, the cylinder. In the study of these three intimately related forms, it is desirable that the models used should bear a certain relation to each other as to size; the height of the cube should be equal to the diameter of the sphere, and the cylinder should be equal in height to the cube and in diameter to the sphere. Following the exhaustive study of the three fundamental forms, may come that of all the geometric solids, though probably no teacher would

care to exhaust the list, modeling each, cutting half sections and planes, and accompanying each with all the occupations possible. When a limited number of forms have been thus dealt with, the child has received a good degree of training in the art of passing from the concrete to the abstract; and other forms may be studied in less full manner.

If the making of a complete series of models were our object in this work, we might go on indefinitely; but, our purpose being to develop powers of observation and to give the child exact knowledge of common forms, together with facility in making them, a good degree of perfection will not require the exhaustion of possible forms. What forms may be profitably studied in primary grades is well indicated in Prang's series, and includes beside the sphere, cube and cylinder, the two spheroids, the ovoid, the prisms, square, and two triangular ones; the pyramids, square and triangular, with the cone and vase form.

As Form Study is a preparation for drawing, outline drawing, in tracing outline of patterns or stencils, and in free-hand, should be introduced as soon as possible. The work of the first grade in school may well include the study of the three fundamental forms and of the prisms. In the second grade the remainder of the forms enumerated may be profitably studied. Paper cutting, which logically follows paper folding, may have a prominent place in the second and third grades. The cutting of surface forms in clay, soap or paraffine is too difficult and too unusual for our common schools as now constituted. Wood carving may be put in the same list.

Along with the representing of things in nature and art, by various methods proposed, may come the making of many useful things for the home and playground. Lessons in dictation, which are the best exercises in connection with tablet, ring and stick laying, and in which we work according to law of opposites, are valuable among other ways in stimulating inventive designing. In the study of the geometric solids, the child has laid the foundation for future study of geometry. Dr. Hill, in his Order of Studies, recommends the study of geometry to precede that of arithmetic. He says, "Geometry is the earliest and simplest of all possible sciences." Also, "The earliest abstraction from the idea of form is number." In the representation of leaves, flowers and fruits studied, we may, attending our work with careful observation of parts and union of parts, lay the foundation for later study of botany. Something of minerology and geology often find a place in Form Study. In a clay modeling school, I have seen young children modeling animals, thus entering the field of zoölogy. The child writes about nothing so well as that which he has actually done. Then we may frequently let the primary language lesson be about forms studied; and among the best reading lessons are those written by the children themselves.

It will not be the province of Form Study in the primary school to turn out mathematicians, scientists or artists, but simply to do its work in educating the whole child. Partially educate him and he is unbalanced. It is the co-education of the eye and hand with the brain that is needed. We would not claim Form Study as a panacea for all the ills and perplexities of primary education; but has it not a place in our curriculum?

GENERAL DISCUSSION.

PROF. E. A. STRONG, Ypsilanti :

Mr. Chairman and Members of the Association: I rise to enter upon the discussion of this paper because I have been asked to, and I may add now that the paper has been read in my hearing, because of my present interest in the theme which has been so charmingly presented to us in this paper. The paper has appealed to me in many ways, but especially as a man and as a teacher of physics and chemistry. It is as a teacher of the physical sciences that I desire to say a word upon this subject.

I think we all recognize two kinds of pupils or students as we find them in our grammar and high schools and colleges. One we may call the literary student, who learns all his lessons just as he would learn a bit of very precious literature. With him, study is a very simple matter; there is his lesson and he learns it, every word of it, just as he finds it. If he understands the lesson, very well; if not, just as well; like a good boy he gets his lesson and duly forgets it; he goes on to college and does the same thing there and does it well. Now this boy, if he has a mind of some quality, is capable of making a scholar. He does not, perhaps, understand the lesson of to-day, but to-morrow he comes to understand something of it; a week hence it has revealed itself to him still further; until finally the events and lessons of his school life come to have real power with him. And so we have the literary method—we may call it the dogmatic method, or the method of authority if we will. The point is, that the pupil learns what he is told to learn and says what he is told to say; on many sides, I repeat, a very admirable method of instruction and acquisition.

We find also the other type, the one who would understand what he learns, who doubts and questions as he studies; a sort sometimes a little cranky and a little hard to get along with, and yet likely to prove the superior kind of man after all. He spends the strength of his work in getting a clear mental picture of that which he is studying, whether it be a physical object, an event, or a principle. This done, recitation is simple and easy, as he simply talks of that which he sees and knows. It seems to me that the pupil who early begins this kind of form work, will acquire the admirable habit of forming clear mental pictures to be called up by the appropriate name. He will not describe objects in set words just as he has been told to describe them, but the pictures come up before him and he describes what he sees with his clear mental vision.

Let me refer to my own experience as a teacher of physics. There come up to me every year pupils prepared in our admirable high schools for the study of advanced physics. In many things they are well prepared. They can often give definitions and principles well; but I rarely find pupils who really see the things of which they talk. These things have been before their eyes, but having had insufficient training in learning to see, they have not now, nor have they ever had, any clear mental vision of physical objects. How few know even how a barometer tube looks! I remember giving as a question at an examination: "You may draw the water service upon your table in the laboratory." They had been to the laboratory for many days previously, had seen and used the water tap, bowl, etc., and yet they did not know anything about it. What was the difficulty? They had not been educated in form. Nothing was seen with perfect outline so as to be presented to the mind in true form when the name was spoken. It seems to me that a pupil who has been taught in the way indicated in this paper, who has modeled the things, spheres, cubes, cylinders, etc., which he is learning to describe, would speak of them always from a clear mental picture; there would be no vague-

ness, and education would go forward upon a sure basis. I am sure that this form work and all that would naturally grow out of it would be very valuable in our schools, would be very valuable in my own department.

But I said that the paper appealed to me as a man, and not alone as a teacher. After all the main value of this sort of work would be in cultivating the sensibilities of children. They cannot do this work of modeling without learning to love the play of light and shade upon objects in relief, and delight has enormous educating power.

SUPT. CLIZBE, Ionia :

Mr. President—I would not take your time, but I wish to say one word in connection with this subject. "Knowledge is power" has been said, but I believe in connection with educational matters that a better statement is, Education is power. The comprehension of size, form, and their relations act as a lever in which the pupil has the long arm, and he has the weight of all his reading lessons, all his arithmetic lessons, etc., on the short arm. This knowledge acts as a pry to open to the child's mind the difficulties of his studies. This system of form study as outlined in the paper is worth more than it costs. A pupil is able to get all his knowledge better by the knowledge he has of the form and size of those things that are kindred to it. The greatest difficulty I have in teaching physics in the high school is that pupils have not a sufficient knowledge of the size, form and relation of things to easily conceive problems that are found in these studies. Boys from the country who have had nothing but the relation of form, size and the like are the best in the class, not because they are smarter, but because their environments up to the time of their coming to the school have been such that they readily learn to conceive the relation of things; the weakest scholars in this respect are the girls who have always lived in the city. They are hardly able to pull through. And I observe that those who have paid most attention to the particular subject of forms as it has been outlined here to-day, understand much better than those girls who have not had that previous training.

PROF. MILLER :

There are one or two other thoughts that the paper brought out that I will mention: It is necessary, it seems to me, to make the pupils interested in their work. This form work will interest the children. Another important feature of it, it seems to me, is that it teaches them self-reliance; each little boy and girl works for himself and herself, and this cultivates self-reliance, which is a very essential thing in bringing about good scholarship.

SUPT. COX, Hancock :

There is one point in which the last paper touches the paper that was read a little while ago. The speaker in the last paper says she does not teach words without teaching the meaning of them. Shakespeare makes one of his characters say, "What do you read, my lord?" And the answer is, "Words, words, words." And that is of what we have heard this afternoon. One of the things we need in teaching reading, so far as my experience goes, is to teach the meaning of the words.

PRESIDENT FISKE :

A few days ago I was in a school-room, and a child, upon being asked the definition of arithmetic, gave it as the science of numbers and the art of compunction.

SUPT. WELLINGTON :

I would say that form study has been carried out fully and heartily for two or three years with us, and while it has not reached all the way from the kindergarten to the

high school, yet the work is being done in all the grades and its work is being felt in the high school; and the difficulty that has been mentioned of finding boys and girls in the high school not being able to understand geometry is not as great as it was a few years ago. Of course we all understand that boys brought up in the country will tackle geometry with greater ease than city-bred scholars. But we feel that we have accomplished a great deal by form study and drawing.

PRESIDENT FISKE:

Do you believe, in teaching drawing throughout the schools, in each teacher following some particular plan, or teaching it just as she likes?

SUPT. WELLINGTON:

In our school we have a special teacher for this work. But I do not see why the superintendent could not, in a measure, be a director of the work, and have Form Study taught from first to last with very gratifying results.

MISS NINA VANDERWALKER, Ypsilanti:

I think all primary teachers have felt the need of something in the way of object work. But this object work is unsystematic, and consequently without good results. Form work will systematize this. Thus we might, in form work, take fruit one day, minerals the next day, and so on with the different lines of object work that we wish to introduce, the form being the thread upon which we can unite all these things. There is nothing that will so induce a child to look for the similarity, difference, and relation of things as Form Study.

SUPT. HAMMOND:

I would like to inquire if it would be thought profitable, providing a teacher has not had the necessary training to teach this work in a systematic manner, to attempt to take up this work—for instance, drawing that would be somewhat along this line—in a fragmentary manner?

SUPT. E. T. CURTIS, Calumet:

I think I can answer this. It is not necessary for a teacher who engages in this work to be skilled in it. A teacher who has reasonably good skill and judgment can conduct this matter and find the work a help, not a hindrance. I know, because in the school where I am we had it carried on by skilled and unskilled teachers, and in both cases the children, the parents, and the teachers are all proud of the results. Instead of proving a hindrance to their studies, it has proved a help. If kept within proper bounds, it should be a counterpart of what the child can do with the regular work of the school. Form work should be used from the lowest to the highest grades. And we find we do not do any less work in any department because we add this form work. The delight the children find in it is a constant source of pleasure.

SUPT. HAMMOND:

Is not this in a system of schools where some one can direct and guide the teacher? Should not the superintendent or some one who understands this question pretty thoroughly indicate what shall be done?

SUPT. CURTIS:

It is not so difficult teaching as the gentleman may suppose. Instruction can be had by correspondence; and even if the work be not, perhaps, of the very best, it is of a kind good enough to make up for the time expended.

PROF. STRONG :

That there is the aesthetic side to this question ought not to be neglected. The great delight which we have in seeing beautiful pictures is because of the beauty of light and shade. And as the child moulds the different form, he sees not merely the form, but he sees there is beauty in it. How much a child cares about it! He has made that sphere, and he has looked at it with the eye of an artist. He has learned the difference between light and shade; he has learned to love it. A child says the multiplication table, but what does he care about it? The trouble is the children do not care about what they are learning. But as the light plays about the form the child has made, he comes to love it. I cannot elaborate upon this point, but to my mind it seems a great one.

Do what you can to teach the children form work. A scholarly man may go all wrong, while the person feeling his way along may be more successful. Do what you can; do a little of it any way, feeling your way carefully, and that little may mean a great deal to the children.

CHARACTER SCHOOLING.

BY REV. HOWARD DUFFIELD, DD., DETROIT.

Mr. President, Members of the Association, and Friends: The night after Christmas is more suggestive of the physician, than of the minister. Experience would prescribe pepsin, rather than principles. This very circumstance, however, may help to emphasize the point of departure, from which these somewhat fugitive remarks shall set out, viz.: "Is life worth living?" It may also help to indicate the goal to which, unless lost by the way, the course of thought shall at length return, viz., the somewhat witty answer once given to this inquiry: "That depends upon the liver."

Mr. Mallock was not the first to state and to debate this question. It comes to us, encrusted with the lichen growths of many centuries. It is as ancient as thought. It is as universal as mind. It is the great tap root of the olden myths. The riddle of the Sphinx was this "riddle of the painful earth." The Titan battle with the gods, is repeated in every grapple of man with the gigantic elemental forces, of which he seems the helpless sport. The Promethean agony, sublimely pictures the indomitable will, "cabined, cribbed, confined," in endless struggle to outleap its material limitations, and writhing in chains, under the beak and talons of daily defeat. This central problem of to-day was the grim enigma that drove Buddha apart from human companionships, to brood amid forest solitudes, in weary lonely thought. This was the gordian knot that the subtle philosophers of the Academy could not unravel, nor the keen-edged logic of the Stagirite cut. This was the dark and dreadful form, that stalked with reverberating tread across the stage of the Greek tragedy, and whose sombre shadow lies athwart the radiant pages of Latin eloquence and song. This was the loom, in which was woven the web of that mysterious drama recorded in the book of Job. This mighty interrogation point struck the key-note of the Divina Comedia, and furnished the theme for the stately measures of the Miltonic verse. It was the mystic problem over which Hamlet soliloquised. It was the crystalizing *motif* of the Faust legends. It was the target for the bitter raillery of Byron and of Shelley. It is the wailing undertone of the In Memoriam.

The reply to this question will vary with the replier. The worth of living, depends upon the definition of life. Eyes, and minds, see the same thing differently. The simplest physical fact shifts its bearings with the point of sight from which it is looked at. Such a daily commonplace as

sunrise wakens a strange variety of conceptions. Sunrise to a laboring man, means the end of rest and the beginning of toil. Sunrise to the scientist, is linked with the thought of cosmic forces, of planetary revolutions, of infinite spaces. Sunrise to the artist spirit, conjures up the picture of the Sun god, mounting his superb chariot, while the sun steeds champ impatient for their lofty flight, and the thronging hours are flinging garlands, fragrant and beautiful, upon the waking earth. Sunrise to the soul surcharged with devotion, is a revelation of the ineffable splendors of Jehovah, and evokes the rapturous cry, "Behold, I see an innumerable company of the Heavenly hosts saying, Holy! Holy! Holy! is the Lord God Almighty!" So life will reflect individual ideals. To the toiler, it is a treadmill; to the philosopher, a riddle; to the poet, a symbol; to the cynic, a bubble; to the epicurean, a butterfly chase; to the believer in its divine origin and issue, spiritual tutelage, character culture, opportunity for the education of God-entrusted capacities. If the great dramatist wrote truly, when he said, "All the world's a stage, and men and women merely players," life would lose its pith; greatness would be only superior acting; character would resolve itself into a nicely played part; morality would become a neatly adjusted mask; learning and art, patriotism and philanthropy would be only stage properties, paste jewels, tinsel trappings; death would be but ringing down the curtain upon a scene of desolation, in which misery and mystery were the only realities, and all else a hollow display of the mimic art. But the world is a school; and men and women are the pupils in it. Earthly existence is academic. The globe is a moral gymnasium. This planet is the primary department in the seminary of being. The human race are freshmen in the great university of God. Incidents are never accidents. Events are lessons. Experience is a divine curriculum for the development of energies, the expansion of capacities, the discipline of powers, that are embarked upon a career which cannot be measured by the hour glass of time.

The chief dimensions of a schooled character will lie within the triangle of these three virtues, Humanity, Individuality, Persistency.

I. Humanity. As sentiment, humanity is universal; as experience, rare. From a far off time, our ears are saluted with the finest verbal expression of its spirit. The walls of the Roman amphitheatre rang to the echo when a pagan player exclaimed, "I am a man, and nothing that pertains to men is a matter of indifference to me." Yet the plot of that very play of Terence, pivots upon a father's crushing out the maternal tenderness that recoiled from infanticide. The intervening centuries have but poorly succeeded in importing into practical realization this anciently, this universally applauded sentiment of humanity. The cries with which the communistic atmosphere in this troubled evening-time of the nineteenth century is quivering, show that the divorce between the ideal and the actual still exists. This chaotic clashing of social conditions so characteristic of the present hour, this ceaseless surging of antagonistic forces, is but a surface token of a heart-deep conviction that the brotherhood of men should at length be clothed upon with some substantial form, and the equality of man resolve itself into something better than a poetic phrase. This turbulent heaving of society, is the billowy roll of some new ground-swell in the mighty ocean of humanity, born of the invincible persuasion that nothing can be right while the weak are wronged; that nothing can be just while the iron-shod heel of injustice

treads down the helpless; that nothing can be of profit while the work of the humblest toiler fails of its adequate reward. He who is wise to discern the signs of the times will imbue his character with the spirit of humanity as the very metaphysic of its culture.

The unity of humanity finds its type in that vast network of forces which enfolds with its subtle meshes the sum total of material existence. The more searching the lens, the more certain the truth that the universe contains no isolated atom. The dew-drop, that sparkles diamond-like upon the grass blade, is the child of old Ocean, stolen by the thievish sunbeams, hidden in the caverns of cloud-land, captured by the giant mountains, and carried to its resting place by the unseen spirits of the air.

The unity of humanity is being emphasized by the progress of modern discovery. The planet is shriveling. The equator is dwindling. Thought girdles the globe more swiftly than time. The traveler glides across the surface of the earth more rapidly than the sunlight. Nations that but yesterday seemed separated by the distance of the poles, now stand shoulder to shoulder. The antipodes are next door neighbors. All men are within arm's reach of every other man.

The unity of humanity was perceived by the old Scandinavian seers, as they brooded over the mysteries of existence. They came to view humanity, not as a mass, but as a growth. They emblemized being, as a tree. In weird and Runic rhyme they sang of Igdrasil, tree of existence. "It had its roots deep down in the realms of death; its lofty trunk touched the cope of heaven, and its spreading boughs swept the skirts of space. At its feet sat the three sisters, watering its roots from the sacred well. Its buddings and dis-leavings were events, things suffered, things done, catastrophes; every leaf was a biography, every fibre an act or word." In such quaint, strange metaphor, these ancient bards figured mankind as knitted by countless ties into a single bundle of being. By the flash of their intuition they beheld that august truth proclaimed by the voice of inspiration, "We are members one of another."

During the siege of Alexandria, sub-marine wires carried the sound of the battle roar from the delta of the Nile to the Island of Malta, three hundred leagues away. Those widely separated lands, quivering with the same battle throb, is an almost visible illustration of that pulse of common feeling that should beat with ever increasing strength throughout the race. We cannot disentangle ourselves from this universal fraternity even if we would. It touches us at every angle. It envelops us like an atmosphere. The simplest item of daily life has behind it a long chronicle of someone's toil on our behalf. Market prices fail to indicate the expense that is enfolded in the commodities of commerce. The raiment with which we are clad tells the story of a patient shepherding of the flocks that are upon a thousand hills; of a tireless, monotonous drudging at the whirring looms in the noisy, weary factory; and many a time it is stitched with sorrow, and brodered with heartache. The coal that flames with genial glow upon our hearth and fills our rooms with light and warmth was liberated with pick and blast from the dark dungeons of the earth by some brother man, who is wearing out his days in the chill shadows of the mine. Every dish of food upon our table is a hieroglyphic which stands for labor in field and mill, or perchance beneath the fierce beams of a tropical sun, or the facing of deadly peril upon storm-swept seas. One cannot look from the window, or step

upon the streets without encountering the argument and appeal of need. Want and wealth are never far apart. Luxury is always elbowed by misery. The stately dwellings of the rich are never at great remove from the hovels of the poor. The circle of light that streams nightly from happy homes is fringed by the shadowy and flitting forms of the outcast and the hopeless. The music that wells from glad hearts, falls like the beat of pitiless hailstones into hearts that are bereft of all joy. And the sight and savour of plentiful provision for all the possible wants of life, often plant a keener pang in the many who starve in body, and who are famished in soul.

Such conditions make special appeal to the educated classes. They are exposed to a two-fold peril in dealing with the question of human need. There is danger of their becoming blunted as to its reality. Intellect tends to isolate. Brain culture tends to the disregard of heart need. Education may serve only to erect a barrier between classes more impassable than Hindoo caste, by the creation of an intellectual aristocracy. Culture may come to be a mere mental lotus-eating, that shall enervate all that is finest in character, enchain the powers in a languid indifference to the realities of existence, and transform life into a dreamy insulated existence in some shadowy elysium, whither the wail of human woe shall never penetrate.

There is likewise a danger of over-estimating the helping value of learning. Education, is sometimes mistaken as the panacea for the world's need. The light of knowledge, is supposed to be sufficient to dissipate the clouds that shadow life. Brain power, is imagined to be the talisman for heart ache. The learning of books, is often regarded as a balm for all the wretchedness that broods over human life. The vision of Heine was a parable of the impotence of culture. Overworn in the effort to solve the deep problems of existence, smitten with a weary hunger of the heart for light, in vision he falls at the feet of the Venus de Milo, his supreme ideal of beauty. He implores her aid, only to behold her bend toward him eyes of yearning pity, while she cries, "Dost thou not see, I have no arms, and therefore I cannot help thee." That resplendent figure was an apt and queenly symbol of purely mental culture; ravishing in its grace, but heartless; stately in its pose, but helpless; unable to uplift and to enfold the sinking heart; a splendid smile wreathing its lips, but superbly and serenely disdainful of the rushing tides of life, whether they lap lovingly, or chafe furiously, the pedestal which upholds her pictured grace.

Brain power should never be divorced from heart culture. Intellect should always be mingled with feeling. Learning should be counted ignorance, until it has become keen visioned enough to arrive at some practical definition of humanity; until it has become keen edged enough to cut to the core the fallacy concealed in that cant phrase, "the masses;" and recognizing the truth that there are no "masses," save to the politician, in his selfishness, or to the philosopher in his formulas, or to the dreamer in his slumbers, centers its contemplation upon the molecules of which humanity is composed, the separate, living souls, each with infinite possibilities and soaring aspirations, with bitter sufferings and crushing woes, and studies with unwearied desire, how to expend life so that existence will be brightened. "With what, sir, do you mix the colors that so glorify your canvas?" asked one of Sir Joshua Reynolds. "With brains, sir!" was the reply. With what do you mix the elements that fuel the forces, and string the fibre of your character? Let the answer always be: "With heart, sir!" The princes

in the realm of letters, like Scott and Cooper, like Burns and Dickens, mixed heart with their ink, and thrilled the world with the truth, that whether daubed with war paint, or cased in armour, whether grimed with toil, or ground by poverty, "A man's a man for a' that." He proved his right to wear the purple, who selected as the blazon for his coronet, "Ich Dien," I serve! The best servant of men is the princeliest. The architect of St. Peters' modelled that sublime dome from the arches of the human skull, but a grander temple builder is he whose work is patterned after the fashion of the human heart; who fain would spend his powers in lifting above the dark shadows of despair the sun-lighted spires of hope; in rearing with toil and pains, the altar-stairs of holy peace, whither burdened souls may climb and be at rest; in scattering sympathies that sweeten the air like incense; in stirring energies that quicken the heart like the roll of organ notes; in flinging athwart the dull hard paths of pain and want, the gleam of truths that shine with a lustre more glorious than the light which, streaming through cathedral windows, paves the stately aisles with splendor.

II. A second trait in which character should be schooled is Individuality. A tramp in Detroit the other day went to one of the prominent business men, and asked for help. "What do you want money for?" the gentleman inquired. "Well, sir," he replied, "I want to get married." "Why, you are a queer customer to get married. Have you any business?" "No, sir, I haven't any business; I support myself by what I pick up." "Have you any home?" "No, I live wherever I can find a place to sleep." "You hardly look as though you owned the clothes you have on." "Well, I don't," he replied; "I am paying for them in installments." "What do you want to get married for, then?" "Well, sir, just because I would like to have something I could call my own." Even tramps are instinct with individuality. The poorest wayfarer along the journey of life desires a something that is his own. We are all ambitious for the distinctive. The universality of this tendency is the outcropping of elementary principle. The primal truth of the unity of the race, is in equilibrium with the no less fundamental fact of the personality of the individual. Variety is as patent in the material creation as unity. The stars with which the firmament is sown differ, star from star, in glory. Grass blades, forest leaves, sand grains, are none precisely similar. Myriads of men tread the earth; no two faces are alike. In the organism of the universe, there is a place for every part, from central sun to drifting dust; there is a work for every one, from the king upon his throne to the maid servant that is behind the mill. In the achievement of the world's work no proxies are received, no substitutes are possible. One cannot bear the responsibility of another, any more than neighbors could exchange shadows. The true helpers of men must each think his own thought, and not run his ideas into the moulds of another; must each advance along the lines of his own personality, and not seek to wheel in the ruts of another. The measure of one's helpfulness will largely depend upon the extent to which he maintains, undeformed, his individuality.

Once and again the dream of a universal empire has cast the glamour of its spell over the mightiest of men. The bringing of the whole world into subjection to a single mind, the converting its mighty continents into the provinces of one vast domain, the rendering its proudest nations but tributaries of a single splendid throne; the massing of all its wealth, and art,

and power, under the sway of one mighty monarch; this is the dazzling vision, the magnificent will o' the wisp chased after by Alexander, and Cæsar, and Charlemagne, and Bonaparte. But the idea of a Pan-planetary sceptre finds its only realization in the monarchy of Fashion. Opinion alone wears a universal diadem and exerts a limitless tyranny. Custom is a veritable Jupiter Tonans, whose terrific nod sets the world a trembling. There are social "gorgons and chimeras dire," usages as monstrous, tenets as unjust, habits as grotesque, errors as destructive of all true manliness, as any fabled griffin of the olden time; and they demand for their overthrow a heart as brave, and an arm as stout, as any celebrated in the annals of romance. Truth and right are coming to be confounded with the voice of the mob. In a sense most foreign to its true one, the voice of a popular clamor is heeded as though it were the voice of God. Fashion tends to convert art into a synonym for a shallow aestheticism. Fashion has issued her ukase against all rugged strength of character. Fashion would pare down the clear cut lines of sturdy enthusiasms, and render character limp, lax and saltless. Fashion has tuned the thought of the day in the key of *nil admirari*, and to be in fiery earnest about anything, except heaping up money or clambering up the social scale, is to be *horresco referrens* in poor form. Policy usurps the place of principle. Success rivals charity as a cloak for sin. "Will it pay?" is the watchword of the age. "Is it right?" has become the shibboleth of old fogysm. "They say" has more power over most souls than a "Thus saith the Lord." "They all do it" is an argument of greater weight than the thunder tones of Sinai. The dictates of etiquette are more binding than the codes of the Decalogue. A chuckle will make him tremble who would laugh in a cannon's mouth. Many would shatter the commandments rather than eat with a knife. Many would rather be immoral than ungrammatical. Fashion is putting manhood into a straight-jacket. The drift of the time is against independence. This was what the Laureate meant when he sang "The individual withers and the world is more and more." This is what Emerson had in view when he wrote "Society is in a conspiracy against the manhood of its members." This was what prompted the Sage of Chelsea to growl in his grim, humorous vein, "That very spectacle of an immortal nature, with faculties and destiny extending through eternity, hampered and bandaged up by nurses, pedagogues, posture-masters, and the tongues of innumerable old women (named "force-of-public-opinion") into the meagre pattern-figure that in these days meets you in all thoroughfares; is not this spectacle highly tragical, if we had eyes to look at it?"

The benefactors of men have ever been challengers of public opinion. Angelic voices summoned an humble peasant girl to an enterprise of great personal sacrifice for a great public good. Parents entreated, courtiers sneered, the people scoffed, but not disobedient to the heavenly vision, she ran a triumphant tilt with all the "they says" of her time. For her king she won a crown. From her land she repelled the invader. For herself she gained the usual meed of independence at a martyr's stake. But to-day French soldiers present arms in the market place where Joan of Arc was burned. The achievement which Carlyle singles out as the kingliest in all history, was the firm, unblenching front which the monk of Wittenberg presented to the glittering court circle of the monarch of half the world, when, target for the thunderbolts of sacerdotal anathema,

he declared, in unyielding championship for the truth, "Here I stand, I cannot do otherwise." Had he been less firm, we had been less free. True to his own conscience, he uplifted the generations. He broke the bonds that fettered the human mind. He settled for all time to come that thought passes toll free. He shed benediction over all the after ages.

Not long ago a text of scripture was curiously misprinted. It was intended to read "Daniel had an excellent spirit." The types proclaimed that "Daniel had an excellent spine." Excellent spine is the thing most needed by the men of to-day. Our times demand men of an invertebrate intellect, of athletic culture, of sinewy thought, of intense and intelligent allegiance to truth; men that can withstand the shock of the world's contempt, that can resist the sway of fashion's follies, that can cast off the enervating malaria of public opinion, that can imitate that Swedish king whom Wordsworth sung, and "do the thing which ought to be, and stand above all consequence." Anathema is bitter, and praise is sweet, but neither popularity nor contempt determine the true values of life. Conflict is hard, compromise is easy, yet, as the Koran teaches, "Paradise lies under the shadow of Scimitars." Genuine manhood dares to stand alone; its coat of arms inscribed not with a weather vane, but a magnetic needle; and it will yield no God-given conviction to the voice of a popular clamor, nor will it ever decide truth by a majority vote.

"To thine own self be true,
And it must follow, as the night the day,
Thou canst not then be false to any man."

III. One other trait should mark a schooled character—Persistency. An old Scotchman, who was chronically in the opposition on account of his conscience, was once asked what his idea of conscience was. "Well," said he, "my conscience is that in me which says, I won't." Whenever one is facing toward the right point of the compass, it is worth his while to adopt this Scotch philosophy, and resolving his conscience into "won't" power, refuse to swerve. Persistence, is the long for "pluck." It is that virtue which Milton sang under the phrase, "Uphillwardness." It is bull dog tenacity, minus the ferocity. It is mulish obstinacy, lacking the stupidity. It is miserly greed, bating its sordidity. It is just what granite would be if the hardness of granite had a heart in it.

To strike a single blow for the right is easy. To run one tilt with error is exhilarating. But when the blow falls ineffectual, and must be repeated; when the lance thrust is repelled, or only wounds the empty air; when the sword blade becomes hacked with conflict, and the arm wearied with the smiting, and the heart sickened with the strife, then persistency becomes something more than a high-sounding word. It spoke in the words of Wellington, who, riding upon the field where a regiment had lost six hundred men before they pulled a trigger, said, "This is hard pounding, gentlemen, but we shall see who pounds the longest." It echoed in that ringing cry with which the oaken-hearted British sailors responded to the French battle shout of "Glory!" with a strong and solid antiphony of "Duty! Duty!" Persistence is a fireside grace and wakens no blast upon the trumpet of Fame. It is a sentinel virtue that walks its lonely beat through the night and the storm. It is the halo of uncanonized saintship. Aureoles

of golden light are worn by the pictured figures in storied windows; but the more glorious diadem of unweariness in well doing, encircles unseen the brows of many who walk unnoticed at our side through the lowly, dusty ways of life.

* Persistence is a virtue specially needed by him who sits in the teacher's chair, or aspires to wear the robes of scholastic honors. In an age whose greatest theatre of action is the market place, character-grit is an essential for the men who serve at the altars of thought. Many there are, even in this sordid generation, who teach by example the heroism of unselfishness, who are living into life, purer motives and loftier ideas; who, while others lie lapped in ease, or grasp the golden prize of wealth, have watched and wrought without hope of pecuniary recompense, or the desire of financial emolument, "to whom it has been reward enough to pass behind the veil that hides the mysteries of nature and of science, and then return again, their faces shining with the splendors of which they have caught a glimpse." The persistence that is necessary to key up a character pursuing so exalted a vocation has been well described by no less an authority than Mr. Tyndall, who quotes from his own diary the following leaf: "They who are drawn to science as a profession must, I venture to think, be prepared at times to suffer a little for the sake of scientific righteousness, not refusing, should occasion demand, to live low and lie hard to achieve the object of their lives. There are sure to be hours in the life of every young man when his outlook will be dark, his work difficult, and his intellectual future uncertain. Over such periods, when the stimulus of success is absent, he must be carried by his sense of duty. It may not be so quick an incentive as glory, but it is a nobler one, and gives a tone to character which glory cannot impart. That unflinching devotion to work, without which no real eminence in science is attainable, implies the stern resolve, 'I work, not because I always like to work, but because I ought to work.' In science, however, love and duty are sure to become identical in the end." Fidelity, not success, is the jewel that flashes with the brightest lustre in the crown of eternity. That knightly character, who lays his lance in rest for the bringing of good to men, has no herald trumpets to sound the charge, enters upon no lists that are begirt with throngs of bewildering beauty, has no laureate to hymn his struggle in idyls of immortal verse, but One there is, who waits at the barriers of life's arena, to salute him with words that recompense the sacrifice of years. "Thou hast been faithful in a few things, enter into the joy of thy Lord."

Legend tells us that when King Arthur, the flower of English chivalry, stricken in battle, lay

" Beside the silent sea
Waiting the muffled oar,"

he directed his attendant to cast his sword into the lake. Before it reached the surface of the water,

" Rose an arm
Cloth'd in white samite, mystic, wonderful,
And caught it by the hilt, and drew it under, in the mere."

So vanished forever from human sight, a weapon that was precious, not alone for its jeweled hilt and tempered blade, but for the conflicts in which it had

been wielded and the triumphs it had won. Otherwise is it when he, who smitten with the enthusiasm of humanity, speaks his word and lends his hand, with an unwearing persistency to bring blessing into human life. When he comes to lay aside the arms of his warfare, many a hand is outstretched, not to sink them beneath the waters of oblivion, but to grasp them as a precious legacy, and to rewield them in that age-long and irrepressible conflict for the true and the good, with a courage born of their hallowed associations. The teacher does not cease to teach when the hours of instruction are over, nor does the scholar cease to go to school when he has passed beyond the shades of the academy. Said one friend to another, as they passed a form bent with the weight of years, "There goes my teacher of twenty-five years ago. The kindest friend I ever had except my mother." Bancroft, referring to his preceptor, says: "To-day it is nearly seventy years since I passed from his care, but my heart warms with affection as I recall his name." Masson, the English scholar, writes of his instructor: "I could count up and name at this moment some four or five men through whose personal influence, experienced as a student, I owe more than to any books, and of whom, while life lasts, I shall always think with gratitude. The image of one silver haired old man in particular now rises before me, a man not unknown in the history of his country, to whose memory, amid the changing forms of fact and thought, I pay the poor tribute of an undying veneration. Never, never to be forgotten that form gazed on so long! Cold now he lies in a northern grave, and abroad over the British earth walk thousands who with me once listened to his voice, and who, when they too are old and move heavily, will look back through the mist of years, fondly toward him and that distant time." The sciences men teach are thought of by their pupils not as embalmed in books, but as incarnated in the personalities of those at whose feet they sat. When your lips have become forever silent, and those hands that have wrought so tirelessly for the good of others are folded into rest, when the place that has known you here upon the earth shall know you no more forever, and the mosses shall have mantled your memorial stone, still with undying accent shall your voice continue to speak and with unwaning radiance shall your influence continue to shed its beacon light along the ways of life.

I must not close without a momentary reference to this place of meeting. Your assembling in the Capitol brings into touch the representatives of the civil and the intellectual forces of the State of Michigan. Too often are the material and moral elements of our prosperity dissevered; too prone are we to measure our advancement by mere physical standards. We sometimes incline to rate the progress of our commonwealth by its ship loads of ore, or its barrels of salt, or its acres of forest timber. We persist in confounding the big, and the good. Genuine prosperity is to be weighed in scales more delicate than the balances of trade. As Lowell has somewhere pointed out, "Jerusalem is but a dot upon the map of the world which you can cover with your finger tip; Athens is but a speck, as though made with a pen point; and yet Palestine and Greece lord it over the civilized progress of humanity. Six hundred years ago all Italy was covered with the cap that Dante wore. There was little in Germany, a century back, outside the town of Weimer, where Goethe lived." Material prosperity is good, but good only as a prelude to moral progress and spiritual advancement. The School house should never be far from the State house, nor should grass ever

grow upon the high road that unites them. Legislation and education should clasp hands. Then shall seeds of thought produce harvests of thrift; then shall mind and might become wedded; then shall men of thought and men of action join their forces, and the lawmaker and the schoolmaster stepping to the same drum beat, their march shall be swift and triumphant toward that goal, so glowingly sung by him who sounded this ringing call:

“ Men of thought, be up and stirring,
Night and day ;
Sow the seed—withdraw the curtain—
Clear the way!
Men of action, aid and cheer them
As ye may!
There's a fount about to stream,
There's a light about to beam,
There's a warmth about to glow,
There's a flower about to blow;
There's a midnight blackness changing
Into gray;
Men of thought and men of action
Clear the way!
Once the welcome light has broken
Who shall say
What the unimagined glories
Of the day ?
What the evil that shall perish
In its ray ?
Aid the dawning, tongue and pen,
Aid it, hopes of honest men ;
Aid it, paper—aid it, type—
Aid it, for the hour is ripe,
And our earnest must not slacken
Into play—
Men of thought and men of action
Clear the way ! ”

TOPICAL METHOD OF TEACHING HISTORY IN THE PUBLIC SCHOOLS.

PAPER BY MISS JULIA A. KING, STATE NORMAL SCHOOL.

[Read by Miss Annah M. Soule, State Normal School.]

The question of historical method is one of wide interest, but as yet it may justly be regarded as an unsettled question. Any theories which have so far been advanced are largely empirical and not scientific. Experiments have been made to settle what is best in given conditions, rather than to determine any broad principles. The colleges and universities have thus reached a pretty well defined method for themselves in historical teaching. In a conspicuously brief time great changes have been effected in these schools. In the memory of men still living, the history class was relegated to any professor who had a leisure hour for the recitation. Any man acquainted with Greek and Latin could teach ancient history, the connection was so obvious. Any well-read gentleman could lecture on European history, while American history came by instinct. In the best of these schools it would be folly to assert even now that the study of history has taken rank with the classics, mathematics or natural sciences. Educators, by tacit consent, hold it but an indifferent means for culture. It will not, like mathematics, train the reason; it will not, like language, develop power to make nice discriminations; neither, like science, will it make a practical man. What is the use of history then? It is no part of the business of this paper to answer that question, but the mathematician, the linguist, the scientist have made small provision for the training of their *man*.

Tremendous forces are at work on history to-day. Gigantic social, economic, political and religious questions confront the people. The need of the time is *men*, men of affairs. Some of the schools, like Johns Hopkins, are sending out from their political and historical seminaries men worthy to be intrusted with the conduct of communities and states, able to exert an "intelligent guidance of the fundamental common sense of the masses." Johns Hopkins, though conspicuous in excellence, is not solitary in its efforts to solve the great national questions through the education of its citizens.

This advance in the upper schools means a corresponding uplift in the lower, since the demands in the higher will always gauge the attainments of

the lower. The public schools, fitting as they do almost exclusively for the universities, will rise just to the level of these universities. While they admit students on a "colossal ignorance" in United States history, the schools will send out pupils fully prepared for admission. That the standard for admission is being raised, who can doubt? That a corresponding advance must be made in the common school, who can doubt? To consider how the pupil may be given a more effective training in history is the main object of this paper.

Will the topical method best serve this purpose in the public school? The answer to this question will be found in that of four others:

First. What are the conditions, the limiting circumstances which must enter as a determining factor into the consideration of any method?

Second. What is the topical method in its characteristic features and application?

Third. Is the topical method philosophical, that is, in accord with the laws governing mental activity?

Fourth. Can the topical method be successfully applied under the conditions?

Having briefly considered the conditions I shall undertake to show that the topical method is both reasonable in its nature and practicable in its application, and that in the nature of the subject no other method is of equal pedagogic value.

Since the question concerns method in the schools as they are and not as they ought to be, the conditions under which any method is tested must be considered as fixed in regard to length of course, material of teaching, the average age and development of pupil and the teacher.

Uniformly the course in history below the high school is confined to a daily recitation during one year, usually the eighth or last year of the grammar grade. This time is devoted to such study of United States history as can be done without previous preparation in stories or biographies. In the high school one year more of daily recitation is occupied with general history. A few of the so-called university schools add a term in English history, while a few others also offer a review in United States government and history. But since by far the greater number of pupils do not pass beyond the grammar grade any method which will serve the public school must first of all be applicable to that grade. It should not only serve the purpose of the class but it should also do something more for the pupil—the soon to be citizen. In view of the fact that it will be his only training in that branch, it should put him in the way of doing something for himself and by himself later. It should give the impulse and suggest a means for general culture in those things which make for intelligent citizenship.

The material in any case which is made the basis of class work is a compendium of facts called a text-book, and a few maps showing any sort of geography but historical. In some of the larger schools a library of a few voluminous histories and works of travel, now and then a historical tale and a few vagrant poems, some biographies not historical, and an encyclopedia, help to emphasize the extreme need of a good reference library.

The pupil, somewhere between the age of ten and fifteen years, is expected to give not more than one-fifth of his time to this subject—about one hour each day in study and recitation. In case he enters the high school he will devote to the further study about one-quarter of his time for another year.

He knows something of geography and language and is a fair reader and writer.

The instruction is almost invariably given by that versatile genius, a woman teacher. If, somewhere in her course of preparation, she has secured a term's study in this subject, viewed from a teacher's standpoint she is very fortunate. She gives instruction in from six to ten unrelated subjects of which history is one. It will be strange if even with her acquisitiveness she does not often long for more time to look up illustrative material, to make out topics, to draw maps, and to go over written reviews. It certainly could not be expected that such a teacher's mind "could be kept saturated with the spirit of history" which somebody lays down as the necessary condition of effective teaching. A brief course, insufficient material, an immature pupil with a number of lessons in diverse subjects, an over-taxed teacher! Truly a method very successful under such limitations would be marvelous.

What does the topical methods of teaching history undertake to do?

Open a text-book at random and within the space of two pages there are no less than ten important events hinted at by dark head-lines. The difficulty in reproducing such a mass of disconnected facts has led to many devices of grouping into what are called topics. One author, for example, makes a convenient chronological division and groups all events in that period and calls that a topic. Another selects important biographies and relates all matter to the chief actors and calls that a topic; while still another groups events about an important day and calls that a topic. Such topics are merely series of external events combined by the unity of time, place or person. They are like brief catalogues giving number of volumes and price lists.

The following topic is a fac-simile from one of our new United States histories. The like may be found in almost any book of its class. The topic is named "The Political History Between 1789 and 1796." These subdivisions are arranged:

- 1789. The inauguration of the government.
 - The admission of North Carolina and Rhode Island.
 - The Indian war in Ohio.
 - The National bank established.
 - Vermont and Kentucky admitted.
- 1792. Parties formed.
 - Cotton gin invented.
 - Genet's mission from France.
- 1795. Whiskey insurrection.
 - Treaty with Spain.
 - Jay's treaty.
 - Washington's farewell address.

It can easily be surmised that this outline is intended to be committed to memory first and then each point expanded in turn. Here are ten events without the slightest continuity between them save that they all transpired between the years of 1789 and 1796. Each item stands of equal importance as related to the whole or to another, the cotton gin as Genet's mission, the

admission of States as the formation of political parties, Washington's address as treaties with foreign powers. One feels that there has been a conscientious attempt to complete the catalogue—still, if it were best to mention the whiskey insurrection, why so carefully avoid all mention of the events which occasioned it? Why single out the National bank as alone of all the financial measures worthy of mention? The political parties were formed in 1792, “so you see” the cotton gin was invented the next year and “about the same time” Washington delivered his farewell address. Such a topic can not have the slightest pedagogical use. The pupil may succeed in memorizing it by main strength, but that is all he can do with it since the mere naming of a fact cannot produce those vivid impressions which are the foundation of mental activity. It might serve to recall what has already been learned, but even then the arrangement is clumsy, to say nothing of its being faulty in principle.

What is the true principle of grouping events? What constitutes the true unity of a topic? The physicist deals with matter—physical fact. He labors by investigation to discover the truth existing in matter. Science records the truth as read in the fact. So the historian deals with facts. History records the conclusions from the truth read in the facts. Neither regards the fact of special importance only as it is a physical expression of an idea. History records human ideas in deeds and literature translates them into written language. The battle of Marathon is a fact—why have the ages since all told the story? The battle of Bunker Hill is a fact—why will it always be our most glorious achievement? That Cæsar crossed the Rubicon is a fact—why has the phrase come into our common speech loaded with meaning? Why but that the facts are the expressions of some heroic struggle, some ideal aspiration, some determined ambition, some sublime patriotism, in reality, sentiments, feelings, notions, seeking to realize themselves in an object? The idea is the soul, the life, and when once incarnate in a historical deed, it has become the possession of all time, deathless. These deathless deeds, this great mass of historical fact, is the language wherein is written the story of liberty, the story of human life in its growth and progress from solitary savageness into the social relations of civilized communities: the story of institutions, social, legislative, and religious. Wm. Van Humbolt wrote: “Marriage and the family; administration of laws for the protection of property, honor, health and life; communities, States, and alliances of States; churches, societies for charities and social purposes of whatever sort.” These are expressions of ideas or means for their realization.

If the idea gave birth to the historical deed, then the idea must constitute the true unity of relation between the events of any group embraced in a topic. With this in view, the topical method may be defined as the presentation of history through the series of events in which an active historical idea in the various phases of its development expresses itself.

To illustrate this point: Society in its multifarious relations reveals the struggle for individual freedom. The events in the history of the human race have been but so many attempts to realize the idea in facts. Not that peoples have at all times been conscious of the genius of this idea, but in the backward look along the historical perspective it is plainly seen to have been the great determining idea of the epoch. Taking it as the historic idea of our national history, the events group themselves naturally into

seven periods: First, the settlements in communities; second, the establishment and development of their municipal institutions, with their free choice of leaders and jury trials; third, the overthrow of the Puritan Commonwealth; fourth, the oppression by England led to the Declaration of Independence or national freedom, and the attempt to maintain it led to foreign alliance and finally a national union; fifth, the constitution securing individual rights, jury trial, habeas corpus, religious liberty and free suffrage; sixth, the enfranchisement of the negro; seventh, the social movements of to-day, of whatever sort, which look to the realization of the human brotherhood of humanity. Each of these groups is in turn susceptible of division, according to the ideas which aided or retarded the general movement. Take the fifth topic, the constitution securing individual rights under government. At the very outset the different ideas of government divided men into parties, and their workings can be traced through the federal period. On the ideas by which a strong government maintained its freedom, independence as a nation among nations, can be traced. These last named ideas in action, finding means of realization as they do in a "series of historical facts," I borrow the expression because I know of none better, though not so general as the first, still are rightly regarded as a topic. Such would be the finance ideas including debt, revenue, development of resources, etc. On the idea of foreign policy including commercial relations, wars, indemnity claims, etc., these illustrations of grouping, though only partial and sketchy, are doubtless needlessly full, still it seems best to leave no room to mistake the method of topic making. Let it be kept in mind that these topics are not suggested as applicable to the grammar grade, but are simply illustrative.

The development begins naturally at the earliest manifestations of the idea and makes all conditions modifying it matters of investigation. For example, in the subject of slavery it would not be enough to begin at its introduction in 1619. The impulse which led up to that event, all the natural conditions which modified it, the peculiar economic reasons which both fostered and retarded its growth are matters of investigation. In other words, the idea must be kept in the natural condition of its life.

Lazarus, in his work on Ideas in History, holds that each series is best developed separately, and it would seem to weaken association if it were done otherwise. Still it would be necessary to keep plainly in view where each is affected by others, as nullification by tariff, or secession by slavery, in order that there be no confusion in reproduction. The series are developed in the order of importance; that which has been of the widest influence, those ideas which are needed to explain the others, that which has been the dominant idea naturally takes precedence. Thus finance would be of wider influence than an Indian war, foreign relations than the admission of States, as a rule.

There is some question how far each line of investigation should be carried before the thread is broken. Certainly there is danger, if carried too far, of becoming confused. It would be quite impossible to explain the tariff of 1824 without having first determined the material conditions of the country which preceded that time. In the same way the tariff nullification of South Carolina could not be explained until the idea of State rights was clear. In such cases it would seem to be necessary to break the connection and bring both series properly forward. When the connection is thus broken by turning from one development series to another the preliminary

discussion to restore the train of thought is of great importance. The teacher must see that the coupling pins are in before the train moves on.

Having connected the "past history with the present politics," then it is the teacher's work to fit the parts into a whole, to create United States history. The idea, the struggle for liberty with the seven sub-topics as already used, illustrate such a whole.

Having thus far discussed the *what* of the method, it is now necessary to give an answer to the *why*.

First, it is impossible to gain a just conception of the history as a whole in any other way. Unless there is some such idea of the continuity of life, the parts which were wholes during the first period of study are never in the end fitted into the true relation to the true whole, but always remain disjointed, disconnected facts. A stone cutter at work upon one of the great cathedrals in New York was asked by a looker-on, "What are you making?" "The master-builder takes care of that," he replied, "I only follow the pattern. Now, though he had cut block after block, no conception of the finished arch or groin, column or entablature, tracery or capital, had come to him. So, though vivid impressions may be gained of the detail of separate events, unless the unity of idea in them be comprehended, they remain only as separate blocks in the matchless building of the Republic.

Second, the acquisition of true knowledge is builded ever upon the basis of present attainments. Teaching that begins any where else begins nowhere. Our national history affords a number of general topics in which a class in the eighth grade, with a little drawing out by questioning, would feel at home. Take this for example: Our nation, with its three ideas, land, people, government; the land, its extent, its ownership by government, the different good titles to ownership claims, England's title, what she claims, what her claim gave her a right to do, etc., until the whole subject of land discovery, land grants and land tenure had been explained. Or this topic could be developed in a high school class. The Nation—the federal building. 1. The site—the territory. 2. The builders—the people. 3. The material—existing institutions. 4. The plan—the constitution. Such a course will make the very important step of connecting new acquisitions with old easy and natural. The pupil's familiarity with the subject, and interest in it will be found far greater than could have been secured by first lessons in the consecutive pages of a text-book.

Third, knowledge, to be serviceable, must be reproduced when called for. It must lie in the mind so associated that one thing suggested, spontaneously the rest follows. It is possible to associate knowledge so closely that in common parlance it is said, "I do not *remember* it, I *know* it. In such a case of acquisition, fact is joined to fact by the association of likeness. Sully has written, "It is the binding force of similarity which leads to that grouping of facts which produces mental processes; and after these have been performed to the connecting of fact with principles of which they are illustrations." The continuity of time or place is shown by universal results to be too slight an association. The events fall apart, the pupil forgets. The difficult thing in teaching history is to produce mental processes, to make vivid impressions, to stimulate imagination, to exercise judgment, and last, to cultivate a retentive memory. None of these can be secured in any degree until due regard is given to the continuity of idea in the sequence of events.

Fourth, it is one of the fundamental principles of pedagogy that the idea must accompany the sign or else the sign is valueless. The first business of the child is sign learning, the next is sign reading. He is furnished with a means of expression first in order to a means of acquisition later. The chief end of a vehicle is to carry something. So the chief end of a sign is to reveal something. Most science is to-day taught in the laboratory. Why? Because the laboratory material of whatever sort, bones, plants, minerals, or chemicals are signs, physical word forms revealing the laws of science. Literature is the record of men's thoughts in written words. The study of it as now conceived consists in reading the author's thoughts in their written words. History is the record of men's thoughts in actions, facts. Who will say the study of it ought not to be the reading of men's ideas in their actions, the facts? And further that the facts are of the greatest value only so far as they do carry the thought or express the relation. A great teacher has said, "what is needed is an insatiable desire for facts." He might just as well have said what is needed is an insatiable desire for dried sticks. If the facts are the whole of it, then the schools have done wisely in giving so small a place to the study of history.

The topical method of teaching history is thus seen to be based upon true philosophical principle. It is both analytic and synthetic in its progress. It builds up knowledge on a foundation of present attainments, and associates all acquisitions by the inner connection of the continuity of idea of which the fact is ever regarded as the expression.

This constitutes the *what* and the *why*, there yet remains the *How*—the question of adaptability—to the public school.

Doubtless some are thinking it is "too advanced a method" for the public schools. It is true it is a plan which secures excellent results in the middle schools where the work may not inaptly be called laboratory work. In the physical sciences the teacher holds clearly in his mind both the principles and the laws deduced from them. He leads the pupils by a series of experiments to discover the same principles, and after that to formulate the laws. The pupil has discovered no new truth, and only so far as he has made an independent judgment on it is it new to him. Or the pupil may be given a case of material which he is to group, classify according to certain likenesses, and having classified he distinguishes between the groups, describes, defines. So in the science of history the teacher would lead the pupil to the comprehension of national life, to a knowledge of the principles that have shaped, and the laws that govern it. This he attempts to do by the investigation of those events which embody the ideas and relations which make up national life. He leads the pupil, by a series of experiments, as it were, to trace the sequence of cause and effect in the succession of events, to trace the activities which have helped and hindered progress as they are revealed in the onward movement of events, and to mark their culmination and decline. He seeks to follow with them the evolution of human thought which has given rise to social and political action. This is really laboratory work, scientific in that it seeks through a knowledge of facts to reach the principles that govern them.

It will at once be said that the necessary concomitant of laboratory work is a laboratory. And so it is, but it need not be very large or very costly. Besides, that is just what all the schools are sure to have, a laboratory put up in muslin, a text-book. It is a compendium of fact, and rather than

being an argument against the topical method is one of the very strongest arguments for it. What can be done with a single book of facts? Use the facts as the anatomist does his bones—articulate them. For brief illustration, take the thought already suggested—the nation. Questions and answers will develop the included notion of land, people, government. This will furnish a study frame-work for several weeks. Lead the class to state the titles to ownership claims. The claim of the United States to the land began in 1783, when England gave her consent to the fourth of July declaration, England gave it to the United States. The question why England ever claimed it is now referred to the book. Rather careful direction as to page will be all that will be necessary. The pupil has a definite object in his reading and will be sure to find it, together with a good deal more which is not of immediate service. Call up such names as Cabot, Drake, and Raleigh, with incidents and stories to secure a dramatic effect. England found the land. When they have learned what was discovered and by whom, and one date maybe, the question naturally comes, What did England do with the land after she found it? The book again furnishes the answer—the king gave it to some people to use. The next step develops to whom he gave it and on what conditions. The teacher may need to furnish the facts about the rent which the companies and individuals paid, but when the book, because of brevity, leaves an incorrect impression it should be corrected by added knowledge or else omitted altogether. By the aid of a historical map large enough for class use and the book, all the grants of land will be readily located. It would be quite needless to make any mention of such changes as were from time to time effected in boundaries of grants, but always teach the one which gave permanent form to the colony land, as the boundary of the Virginia grant under its last form, rather than either of the others. This land topic can be extended at the discretion of the teacher, only always keeping clearly in mind that territory is being apportioned for English settlements. All other discoveries, settlements, or grants are held in waiting until such times as they are needed to explain the main idea. Having followed this idea sufficiently far to serve the purpose, the question, how did the companies and men use the land, carries the class at once to the second thought—the people. The book will furnish an answer to this question much more easily than at first, for the simple reason that the pupil has seen and handled the facts and now readily perceives their use. The answer comes at once—they made settlements on it.

It can make no difference which settlement is built first, only choose that which is most graphic and easily illustrated. Each colony will follow its own development series until the time when the idea of union for defense brought about united action.

In building the settlements attempt only what is possible with the book. The book has many details in outline, if one may use such a phrase, which effect nothing in the history. Omit all such. Separate the important from the unimportant, and when the important event, as very often happens, lacks clearness of outline, the clearer view must be furnished by the teacher. There is little danger of using too much illustrative material, only so that the child's impressions are sufficiently distinct to be easily reproduced.

That the thought may be in connection with the past from which the present springs, find out why the people wanted to come and settle here. Now the class is ready for the book again to fill out such suggestions, as

the houses they lived in, the men at work, the women at work, the children in school, the people at church, the men at town meeting, etc. These suggestions, while in language suitable to the class, fix attention on those things which expressed the life of the people, social, industrial, political, or religious. It is the nation that the class is developing. Nothing can be omitted which broadens the conception and at the same time gives vitality to the interest. Build up the impressions until the pupils go about those old colonial towns like "an oldest inhabitant." Think you they will ever forget it? Never. The lesson hour is occupied with teaching questions and oral and written reproductions. To carry the illustration further is needless.

In the early part of the course the teacher leads the pupil to certain results according to a clearly developed plan in his own mind, but when the class has acquired some skill in discriminating, the pupils begin to determine the idea for themselves.

A class in one of our graded schools has been employed the past term in making lists of events which express the same idea in some phase, that is, writing events in a historical series—articulating facts. They are using Johnston's history, a book which lends itself readily to such work. When a desirable epoch has been covered, the class goes back and fills out each series. In the final investigation, all possible material is brought to bear, so that the mental pictures may have such vivacity as to make reproduction easy. The chronological structure of the series is now carefully guarded, and a few culminating events are known by their date names. By frequent reproduction the series is at last memorized, though no effort has been directed to that end.

It may be well to anticipate one other objection. It is true that many of the ideas at the root of our national history are not of a nature to be made intelligible to children. It would seem but natural to omit all these till such time as the pupil has reached sufficient maturity to comprehend them. Often, however, the difficulty is in the teacher rather than in the pupil. If the pupil cannot readily grasp the inner connection of events, it is plainly the teacher's business to direct the mind to that which it does *not* comprehend. At once to comprehend events in their totality as a continuous chain of cause and effect could not be expected, indeed, it would be impossible, but the teacher surely may lead the pupil step by step to a child's comprehension of such a whole. This is the best work of the teacher. All the value of history as a culture study comes from below the surface. Culture, in such a sense, includes all that which goes to develop power, quicken mental processes as distinguished from acquired knowledge. There can be little question that power is worth more than the product of power, still some may affirm that the desideratum in the schools is to produce in the boy's mind an examinable knowledge of dates and events. If this be so, there can be no surer way to fit the boy forth in his panoply of fact to withstand an encounter with the examiner and "pass" the grade, than to bring the facts linked after their kind. If that will not make a question-proof harness, nothing will.

But the boy must be trained into the man. The mere information concerning events will be of small service unless he has been taught to "comprehend their logic." The events themselves can be of small significance unless he learns to read in them the record of human thought and action.

While recognizing that it is the knowledge of events which must be made the basis of his judgments, and that the fittest time and place to secure the knowledge is in the public school, it may still be affirmed that any method which does not take into account the "logic of events," which does not represent "the struggle of an idea to gain a foothold in reality," does not teach him history. It leaves him to find small comfort and shelter on a scaffolding outside rather than in the light and warmth within the portal of the palace of learning.

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In order to start from common ground, we will take Miss King's explanation of what is meant by the topical method. She says: "It is reading the idea out of the fact, tracing it through all its course, following all its deviations. Whatever work is done, always the events related in idea will be associated in study."

It is the purpose of this paper to show some of the difficulties to be met in applying this method to the general public school system of Michigan. It is not claimed that this plan is impracticable and wrong in all schools, but simply that under existing circumstances it is impossible to apply it to the general public system of the State, and that, if an attempt were made so to do, it would be detrimental to the best interests of these schools. In this discussion we shall confine our remarks to district schools and grammar grades as Miss King has done, and for the same reason, viz., the greater part of the historical work in the Michigan public schools is done here.

I fancy that every teacher follows this plan to some extent. We wish and expect the pupil to understand that which he studies. We draw the ideas and conclusions from many of the great historical truths pregnant with thought. Under such topics as the crusades or our own civil war we study the facts related in idea, and extend such study even to the causes and results of these events. Yet if we stop here we do not follow the real intent of the topical method. Every great historical fact is the expression of an idea; every great historical man is the incarnation of a principle. Interpret the idea from the fact, extract the principle from the man; then group in your study those facts that express related ideas, those men that represent corresponding principles and you have the topical method of historical study. Let the teacher thus lead his pupils in their study, and he is applying this method to teaching. The essential difference between this and the method ordinarily followed is that this plan requires that the events related in idea shall be associated in study.

I cannot better illustrate this point than by turning to page 34 in Miss King's Tabulation of United States History. This lady has prepared this tabulation for use in her own class and has arranged it according to the topical method. The topic found on this page is "History of Slavery." The outline begins with the introduction of slavery in Virginia, 1620, and extends over a period of two hundred and fifty years to the passage of the fifteenth amendment, 1870. It is expected that during the days and weeks spent in studying this topic, the student will confine his attention exclusively to this phase of our history. When he begins this topic he is supposed just

to have completed a similar topic, "National Domains," extending over a corresponding period. Thus he goes on, topic by topic, until he has completed the list or exhausted his time.

I submit that, while this may be a capital plan for advanced students who are seeking to classify historical data gained largely by previous study, it is not only an impracticable but also an erroneous method to be pursued with pupils in district schools or grammar grades. Why? Simply this: Nearly every one of these great topics goes back to early colonial times, and comes down through the entire history of our country. Let the student begin with this plan and follow it and he never gets an idea of the growth of the nation as a unit. He forms no mental picture of the condition of the entire nation at a given time. His views into the past are down narrow aisles, each separated from the others by the impenetrable walls of his topics. At no place in his study can he stand on an intellectual eminence and, with one sweep of the vision, behold a complete picture of national unity. A tree, a face, a form are all interesting topics of study in a great painting, but who ever heard of studying each by itself through a long, opaque tube, then turning one's back to the picture and trying to give an intelligent opinion concerning the picture as a unit? The relation of position is lost entirely.

Moreover, history is not made this way. The epochs are few in the history of the world when the entire energies of a people were turned in one direction. In the actual life of a nation manifold ideas and principles are blended and interwoven. The great fabric of a nation's history is not made up of parallel threads. He who gets a true picture of a nation's life will see the warp and woof of many ideas so interwoven that they make a complete whole. It is often interesting to pull out a single thread and see how it runs unbroken from one end to the other. One might thus inspect each thread in turn and yet never dream of the beauty or texture of the entire fabric. If we begin teaching history by the topical method, pupils get a wrong idea of the unfolding of the life of a nation. The very fact that certain ideas are grouped in a given topic and other ideas are excluded from that topic, is proof to the child's mind that there is no connection between the ideas. While, in reality, they may have been advocated by the same men, upheld by the same party, and perhaps may have occurred in the same decade. We must remember that to the mind of the pupil in the grammar grades or even the high school these topics are mutually exclusive. They must be so else their boundaries would never have been fixed as they have.

Another serious objection we have to the topical method of teaching is that, while the events in any given topic are taken up in a chronological order, the contemporaneous events in the various topics are not associated in the child's mind. We can hardly conceive a plan that would more tend to confuse a child. The idea that he must go back every week or so to colonial, or perhaps pre-colonial times, and take up some thread of history, then follow it through a period of two hundred or three hundred years only to drop it and go back to another is certainly confusing. This is the work of matured specialists. Pursued with beginners it leads to confusion of contemporaneous history.

I am aware that there is at present much hue and cry against historical dates. Perhaps there is reason for some of this. There may have been taught too many dry historical statistics, and too few ideas. Yet it is quite

probable that the reaction may carry us as far the other way. Dates and facts are quite necessary pegs upon which to hang historical theories. If you leave out the pegs, your fine spun theories will be trod in confusion under foot. When your boy goes out with the theory of free trade or protection without the facts to substantiate his ideas, he soon becomes the proper laughing stock of the community. It is well to gather data before drawing conclusions. The American boy needs to learn this lesson. His assertions are now more ready and positive than are those of his much experienced father. Should we not be slow to advocate a method that makes him more hasty in drawing conclusions, more dogmatic in maintaining them? We must bear in mind that the primary object in elementary history is not purely mental discipline, but rather the accumulation of sufficient facts to enable the student to read, converse, and listen intelligently, together with instilling in his mind noble ideas of patriotism. If these great truths are not learned in the history class the probability is that they never will be learned. Other branches can and do give thorough drill in reasoning, but no other branch teaches the great events of the past. We have known teachers who, in their attempts to make a branch interesting, have almost entirely eliminated the element of hard study by not requiring the student to learn thoroughly the real data from which all true conclusions are drawn. Judging the success of these teachers by the applause of their pupils it was great indeed. But when these same pupils went out into the busy world, which requires facts and not theories, they found that their supposed knowledge of topics was mere hasty generalizations, in support of which they had no facts. In the words of one of these pupils, who is now an earnest 'bread winner,' "I found that it required years of old fashioned study of facts to fill out my hasty outlines of an education."

I suppose most superintendents have had some experience with teachers who are anxious to have their pupils understand the philosophy of history, and who spend whole recitations in trying to impress some far-fetched conclusion upon minds too immature to grasp the thought. How often have you mistrusted that the time thus spent is in an inverse ratio to the clearness of the conception in the teacher's mind? It is a nice thing to get pupils to understand the teachings of history and to think for themselves, but it is first necessary to give them something to think about.

While we find the foregoing objections lying at the very root of the topical method, we notice others no less important which confront us when we attempt to put this method into practice. We must remember that by far the greatest part of the historical work is done in the district schools and grammar grades. The average age of pupils doing this work cannot be over fourteen or fifteen. With such grade pupils a text-book is an absolute necessity. Without it the work is desultory and indefinite. No country is so abundantly supplied with text-books as is ours. Yet amid all this wealth of text-books there is not a single one on United States or general history arranged according to the topical method. Is it not a significant comment upon the practicality of this method, that, with all our writers, and all our publishing houses, each eager to try anything new in the line of a text-book which gives promise of success, no one has as yet ventured to make a text-book according to this plan? If this method is to be used, the first thing is to give us a text-book to put into the hands of the boys and girls. Let the teacher try to supply this deficiency by lecturing and he will

create havoc in the entire school. If the teacher recites the lesson in one class he must recite it in others. When pupils get the impression that it is not necessary to study a given branch because the teacher does the reciting, he will soon extend this idea to other branches, and the result is that looseness, carelessness and idleness will shortly prevail in the entire school. There is not an experienced superintendent here but knows this to be true. If you think an ordinary text-book can be used, the material being arranged differently by the teacher, stop and think for a moment how much you will find, say in Barnes' United States History, on the great topics "State Sovereignty," "Important Legislation" and "National Domains." Try this plan of rehashing the text-book and you will find that it leads to "confusion worse confounded." We do not advocate a hide-bound, text-book plan of pursuing any study, especially history, but simply say that in public schools a text-book, arranged something like the plan of study, is necessary in order to secure definiteness and thoroughness.

If we have no text-book to use, and the lecture plan is tabooed, there only remains the outline method of conducting the work. By this plan the teacher has an outline and assigns references to different pupils. These references are looked up and recited upon in the class. This leads pupils to become original investigators and familiarizes them with a variety of books upon the subject. It teaches them that history is not an exact science like mathematics; that other historians, perhaps better than the one they have been considering authority, regard a given point in an entirely different light. It makes the pupils broad in their ideas and gives them a delight in historical reading, so that they leave their study at the end of the term with a desire to read historical literature, rather than a distaste for all history. These good results are not peculiar to the topical method, every one of them can be brought out by the ordinary method of teaching, provided sufficient time is taken and there is a good library at hand. Indeed, the topical method presents the greater difficulties as it relies wholly upon the library, while the usual plan has the text-book at hand to supply the connection not found in an imperfect library. From the library report of the State Superintendent of Public Instruction we learn that the majority of district schools have no reference libraries, and those that are at all familiar with the few books that are found in these libraries know full well that they are not calculated to assist in historical investigation. What will the district school boy do by the topical method, without a text-book, and with no reference library except an old text-book his father used, a copy of *Thayre's Life of Lincoln*, with perhaps an extra number of *Daniel Boone* or *Kit Carson*. Imagine a boy thus equipped trying to master the topic, "Formation of the Union," "Proceedings of Congresses" or "National Domains." Did you ever hear of a certain grand model they tried to use in the early days of North Carolina? In case there is not a good reference library for the pupil to use the proposed plan offers no real advantages for it leaves the work in such piece-meal shape that nothing is accomplished toward the real development of a topic.

As far as we know there is no outline adapted to public school work which is arranged according to the topical method. The teacher must make his own outline; adjust it to the grade of his pupils and the reference books to which they have access. This supposes in the very outset that the teacher has a wide knowledge of historical literature bearing upon the civil, political,

and economic history of the United States, as well as a fair understanding of the history of modern Europe. In addition, the analytical power of the teacher's mind must be sufficiently developed to unravel from a mass of irrelevant facts those that express the same idea, and properly arrange and group them for the use of the pupils.

References for the pupils must be made not merely to works but to volumes and even pages. Those who are acquainted with the average teacher of history know that he is not able and has not the time to do this work intelligently. When teachers are able to do this they can find better positions than teaching in district schools or grammar grades.

Suppose that in some of the largest and best equipped schools we try to follow Miss King's Tabulation. Upon examination we find that reference is made to sixty-five or seventy different works in United States history. Recently I visited one of the best public school libraries in the State. It contained nearly eight thousand volumes. I doubt whether there are ten others as good in the State. Yet even here I found only twenty-one of these seventy works of reference called for by Miss King's Tabulation. Fully half the entire list was not represented either by the book referred to or by any other that would cover the same ground. There were very few duplicates in this library. Perhaps the subject for the day's lesson is found in the topic "Formation of the Union." There are only four or five books bearing upon the lesson. The class numbers twenty-five or thirty. Shall the great majority go without studying the lesson and trust entirely to the class discussion in order to fasten the points upon the mind? It would seem that this is the only plan that can be pursued. Who can conceive a more slipshod way of doing work? Such a lax method must react on the whole school and make a lasting impress on the work in other classes. Granted that the easy-going way is pleasant, yes, even interesting, to the pupil; and further that it gives him a superficial acquaintance (it can do no more) with a few books of reference, it does not prove the plan a proper one. Interest, while in a measure necessary to good work, is not an infallible guarantee of success. The three months men of 1861 were interested in their work; even more, they were enthusiastic. Yet they accomplished little and were repulsed in their first hard battle. It required months, yes, years of tedious drill, earnest practice and hard struggle to make the "boys in blue" invincible. Even then they did not make so fine an appearance upon dress parade as when their clothes and rifles were new. So, too, the boy can skirmish with his reference books until he fancies that he has smelled the burnt powder of a real conflict. So, too, he may maneuver to the delight of the teacher, the admiration of the visitor. But when he comes to a real struggle, a great battle with the hard problems in an education, he will find a Bull Run every time; there will be no Bunker Hill, no Gettysburg in his life. He has omitted the drill, the practice, the discipline, which only comes by close application, and which are requisites to successful mental conflicts.

We therefore object to the theory of the topical method in the general public schools, because it gives the pupil no mental picture of the entire nation at a given time, because it gives an erroneous idea of the unfolding of the life of a nation, because it leads to confusion of contemporaneous history. Similarly we object to the present adoption of this method because there are no text-books arranged according to this plan, because it necessi-

tates the outline method of investigation which is open to the objections that there are not sufficient libraries in the vast majority of schools, that there is no appropriate outline for the teacher's use, and lastly it leads to shiftlessness in preparation of lessons.

GENERAL DISCUSSION.

PROF. HAYNES :

The last speaker said that he believed in the topical method of *instruction*; how are we to get such without the topical method of *study*? It strikes me, from what experience I have had in teaching United States History in the district schools and also from a more extended observation, that the proper answer to the question as to whether the topical method is the true one for studying history in the public schools, would be, the topical method combined with others. I think, in the early teaching of United States History, the topical method can only be used in a slight degree and on simple subjects. For instance, I remember some years ago, I assigned some topics not requiring much investigation, and they were worked out with thoroughness from books scattered throughout the homes. I would here ask such questions, for instance, as what is the history of our flag? What is the history of the 4th of July? Why is it that we decorate the graves of our soldier dead on the 30th of May? And so, it seems to me, that gradually, by introducing topics that require more extended investigation, we can successfully lead the pupil up to the more comprehensive topics of history, *e. g.*, to the causes which led to the French and Indian War, its effects, etc., and thus, finally, bring him to that broad study of topics which will enable him to grasp the very philosophy of history. I do not think it is much of an objection, that not *all* of these books (books of reference) are found in the school library; in every district throughout the State there are more or less books on history in the homes. It seems to me we should give every boy and girl a taste for history, if possible; and, if we do this, we have done a great deal towards helping each in life; perhaps we may thus save the boy or girl to himself or herself and to his country. I would suggest marrying the idea in the two papers, where it is possible.

SUPT. RUSSELL, Battle Creek:

The last gentleman spoke of the old histories; I have a kind of an idea of bringing those old histories into the school. I requested that my pupils bring to school such a history as they had at home, one time; one would bring the history his father used, another the one his mother used in school, and I found we soon had quite a library. Thus we had a library and could use the topical method of study; we would use these books, study them, and then compare them with the present histories. And I believe that by introducing this topic and that topic, bringing them into relation with each other and studying the relation of the two, we are getting the best view of history that we can possibly get. I think our trouble in studying the topical method is that we do not bring the topics together. I believe that we can bring out more and accomplish more by this method in this way than by any other. And this district library you can get together in the way I mentioned.

SUPT. MCCALL, Ithaca :

Fellow teachers—I have been very much interested in these discussions. It seems to me that the most pertinent question we can ask ourselves in the study of history is, What is practical? What can we introduce in our schools as we find them? or, what method can be used by our teachers? The ideal is well; we should work toward the

ideal; but when we are considering present methods, we should consider their application to the present condition of things. I do not believe that there are in this State to-day one hundred teachers in the district schools who could formulate a proper outline for teaching United States History according to this method; I believe there are comparatively few grammar school teachers who could or would do this. I understood from the paper that the outline, as presented by the author, is not adapted to pupils of the grammar grade or pupils of the district schools. If this be true it is necessary that we should have an outline of work that is adapted and that this outline should be furnished to teachers in these schools. I most heartily endorse the idea of the topical study of history, but it seems to me that there is a line to be drawn between the topical method as presented in the paper and the topical method of recitation. In the high school and grammar school, the topical method of recitation ought to be most heartily endorsed. In the lower grades the method will, of necessity, be more of the catechetical order. But the topical method of recitation is not merely the topical method as I understand it, but simply the primary features of that method. If it is meant to teach by the topical method as pursued in our text-books, I heartily endorse it, but if it is meant to teach its extension over the whole field of history, I think we cannot do this unless we have competent teachers; but if the teachers understand the method and are heartily enthusiastic, if they will bring into their work outside histories and books (if the pupils are of sufficient age to comprehend the subject taught in this way), I doubt not they will be successful in their work and give their pupils an interest in history which will save them from many evils which surround them after they leave the schoolroom; and when the pupils' minds are more mature, they will be able to use this topical method to yet better advantage. To gain a proper conception of a large building, we first gaze at it as a whole, and then, to better appreciate it, we must view its different parts, take it in portions. So in the study of United States History we should first have the pupil take a view of the whole subject, look at it in its unity, and then have him consider it in its individual parts. Some one may say that we look at it in its unity when we look at individual topics. But there are events so closely interwoven that, unless the pupil studies them together, he will not get a proper idea of the whole.

SUPT. R. H. GULLEY

The gentleman has touched on one point that I wish to fight just a little bit. In the first place I don't believe that a pupil in our district schools or in any grammar grade in the graded school is able to comprehend, in its entirety, the nation of the United States. Upon that basis I claim this to be the case,—that a child will become more thoroughly interested in men than he will in any correct phase of the nation's history. A child becomes interested in something that has some corresponding conditions with which he is familiar. My idea in regard to beginning history work is to begin with the stories of celebrated men of history, perhaps begin with Washington. We found from experience in our lower grades that a child will become interested in the lives of such characters as Daniel Webster, Benjamin Franklin, Washington, Thomas Jefferson. After they are interested in these, we can place the times that connect one man's life with another before them. Associate the lives of Jefferson, Adams and many others, but I would not at any time give the child the whole nation. We cannot realize it as a whole ourselves. I believe in teaching the simple things first.

PRESIDENT SCOTT :

I do not rise to carry on any fight over this matter. The subject is the broadest and most difficult of all in our teaching. My experience will cover, more or less, forty-five years with classes in history, and I agree mostly with the remarks of the last gentleman, but I want to say this in addition to what he said: There is one topic upon which all children are united, at any rate all the boys, and that is the topic of heroism; whatever is heroic, in a man or a nation, will always interest the children; and that has been usually the line I have followed. For example, in the Revolutionary war, I would take up men and facts that have been talked about in every farmhouse. I had no difficulty whatever on such subjects; every child would learn about Washington because so many of the facts had been mentioned in their homes. When about nine years of age an uncle (and he was not a religious man) interested me very deeply in the early records of the Bible, because he often spoke of Abraham and Moses and Joshua as being such extraordinary heroes. I notice of late, that while there is but little interest in the Revolutionary war, there is much in the Civil war. Pupils know much about Grant and Lincoln and Lee. They are interested in any man who has shown physical or martial prowess. They admire strength. Let me relate an incident me relate an incident in this line: I asked a Dutch boy recently who was the greatest man in America, and he replied, "Why, Sullivan." "Sullivan! What Sullivan?" I asked. "Why," he said, "that man who whips everybody." I asked a school boy once, "Why is Washington called the father of his country?" He replied, "Because he took Yorktown and whipped that big Lord Cornwallis." He seemed very much interested in that event. In an advanced class in college I asked, "In the political history of the country, what has most concerned you?" "That contest in Congress between Webster and Hayne." Everybody seemed to understand about that contest. I lived on the place for a while where Hayne had lived in South Carolina, and there was his son, and they told me the son looked like his father, and so I described Hayne to the class. I passed right on to that contest or topic, spent an hour on that subject, and then added, "This son was a negro and a negro slave." I spoke of some of the relations of slavery. They had never heard of those relations before, and probably they never forgot what they thus heard.

I believe partly in the topical method and partly not. Pupils must first have general facts. I have taught theological students for years, and I find that even *they* must have a basis of facts; it is impossible for them to understand the topics without logical facts. I assign a portion of history and then the topics; I take these by periods, and I have found we could better take century by century, as does Masheim, than longer periods, as does Neander.

I am glad to see this portrait of Houghton upon these walls. I wish, if I come here again, I may find the picture of Marquette out yonder, and that of Pontiac out yonder, and then bring the children here and let them see them as central figures for historic topics. They can understand men like Marquette or Hennepin, those originators of our commonwealth, and Houghton, to whom we are so much indebted in our day. I wish their portraits might all be here, and their biographies in the hands of our teachers.

SUPT. MCCALL :

I do not wish to speak again upon this subject, but I do wish to be understood in this way: That I am heartily in favor of the study of contemporaneous biography in

connection with history, and nothing which I said has been intended in any way to conflict with that practice.

PROF. O. H. CARSON, Lansing:

I am not sure that there has been, in reality, any conflict in the statements this morning. I was not able to hear enough of Miss King's paper to follow her thought as there presented. I believe, however, that if the two methods here discussed be closely compared, the differences will not be so great as they at first appear. But if Mr. Hathaway has correctly presented the method advocated by Miss King, the differences are both real and great. In that case his own method is much to be preferred, for it is, as I think, the only philosophical one. It is difficult for us, when we have, in a measure, passed the knowledge-getting stage in any subject, to turn our minds back and determine the mental processes involved in that knowledge getting. Yet we know that when we wish to gain a complete idea of any subject new to us, it can best be done by observing it, first in its more general relations, and then descending into a closer consideration of the parts that compose it. Applying the same principle to the study of general history, facts should be looked at first from the standpoint of the whole, and after this, general survey from the standpoint of individual nations; otherwise history will appear to be a set of streams running alongside, occasionally interlacing, one losing itself in the desert here, another starting from a fountain there, but yet, in the main, independent, each sweeping out a way for itself. The same method should be observed in the first study of United States history. First knowledge should be knowledge in cross sections rather than in longitudinal sections. The topical method as given by Mr. Hathaway is the method of scholars who have a large degree of knowledge, and not of pupils who have the full amount of ignorance.

THE CHARACTER OF SCHOOL LIBRARIES AND HOW TO USE THEM.

SUPT. I. N. WELLINGTON, MUSKEGON.

Only a month since the president of this association, Dr. L. R. Fiske, wrote, saying that its executive committee desired that a paper on the subject "The Character of School Libraries and How to Use Them" be prepared at Muskegon.

No more fitting theme for thought, conference and action can come before this or any other body of teachers or citizens. In significance for school and general educational work it outweighs all themes but one. Like the mountain ranges along an entire meridian of our Columbian worlds, this subject spans the whole field of public education and public weal, now overarching and holding in check the earthquake wave of ignorance and crime surging with deep undertone and occasional outburst across the lands, again holding in its bosom the wealth and on its massive tops and sides the fertile waters and soil that shall supply the teeming millions on its slopes and in its vales, with every creature comfort, every material aid, numberless and unrivaled scenes of power and beauty, and, over all, when poverty and wealth and human racing for power and pelf shall have found their true place in the world's creed and effort, shall bring and fill the living leisure for all, wherein the Fatherhood of God and the brotherhood of man are the bond of union, and the vision in "Looking Backward," or better is the practical reality.

In view, also, of the fact that one of the finest library buildings and free public libraries in our State, the building and library being a gift to Muskegon from one of its public spirited citizens, Chas. H. Hackley, is being built and equipped and will be ready for use on and after the 25th of May next, the assignment of this topic to Muskegon is especially happy. For this thoughtful remembrance, due thanks are here and now offered this association, and a cordial invitation is extended each and every member and teachers generally, to attend the dedicatory exercises May 25, 1890. I trust you will allow me temporarily to place before you the architectural view of this building.

When Pericles would educate the citizens of Athens to a keen and practical perception of the fundamental teachings of Greek life and civilization, he raised high on the Acropolis the best achievements of all time in architecture and painting, with masterly adornments in painting, with fitting

accompaniments in music and the drama, daily cementing all these bonds through the classic force of the Greek language, that the eye, the ear, the mind of the citizen might be in the perpetual presence of their educative influences. Gone, may be forever, for the great mass of those for whom teachers toil are these Attic presences and influences. But in their stead are come two mightier presences and influences. Foremost of these is the true teacher, worshiping and working for the fact, the heart, the life, the original teaching power of Him to whom anthems of praise are now rising from every hamlet of the leading nations of the earth. Next in power may we not rank the pure, good books, whose fullest eulogy is in itself a mighty library, whose briefest characterization is the living soul of all past intellectual and moral life, the prolific germ of most intellectual and moral life existing and to come.

For even a fair attempt to meet the trust here and now laid upon me it is but just to name an unsurmountable obstacle. One short month wherein to learn the character of the school libraries, even in our State—for the theme is unlimited—to ascertain what use is being made thereof, and from an actual and careful survey of the field to make profitable suggestions how to use this means of educational grace. The undertaking appeared a forlorn hope. I could hope but to lead the way to later and better efforts by others, feeling that henceforth this theme should grow in our thought, work and conference, till the best libraries and the best use of them is an assured fact in our State.

My first effort cannot be better bestowed than in bringing briefly before you what the association has heretofore done in this line. A letter to the State superintendent brought a return of five volumes of reports. This leads to a suggestion. How many of our school libraries have a file of reports of the S. S. Public Instruction? Teachers surely need these. For the use of the volumes sent, the S. S. thoughtfully sent an index. This fact leads to another suggestion. To only those reports issued since 1885 is there an index. The sole light thrown on the transactions of this association in 1876, for example, is this from the table of contents! State Teachers' Association, page 88. The suggestion elicited is: Why may not our high schools be called on, as volunteers, each to index one volume, the index returned and accepted to be accredited to the high school making it? Enlarge this suggestion and we have an excellent use for the school library. Why cannot teachers require as a part of each pupil's work, in grades above the fifth, that he read some book the teacher shall name, and make a careful index of its contents? Such an index, if satisfactory, may be pasted in the volume so indexed, over the pupil's name. I venture to name a volume for this work—the autobiography of Benj. Franklin, abridged edition. By this fine example, as well as by actual experience, the pupil will learn the great practical value for mind growth, mind exercise, mind furnishing and life uses such work will have for him. I will also name one other volume, that for interesting matter, rare excellence in execution, and large educational value, is among the best. Its only lack is an index. Pupils of and above the sixth grade, if in a healthy mental state, will eagerly read "The Rescue of Lieut. A. W. Greely." The reading of this book will lead to more good reading on the same general topic. The whole subject of the "Origin and Results of Arctic Explorations" from "Frobisher to Greely" will naturally grow from this beginning.

Leaving the path of suggestion and resuming the line of thought that branched thither, we next note in report of 1876, page 366, a brief abstract of a paper on this theme by Prof. I. L. Stone. The paper was strong on the importance of school libraries and censured the misdirection of any funds by statute provided for their maintenance and growth. At that meeting I gave a brief recital of what I had accomplished by the use of about one hundred volumes of my private library, in a schoolroom of two hundred pupils in New York State, during the years from 1860 to 1865. My experience, then, led to the germ of a still growing conviction that the time must come when text-books, as such, with their narrow scope and narrowing influence, would retire to their true place among school means, being very small rivulets from the great reservoir of truth which the ages, by their great workers and thinkers, have gathered and stored. As manuals of English literature, for example, disappear, Shakspeare and the noble band of English and American authors live again, restored to their own flesh, blood, and vigor, and clothed and in their right mind, may dwell, yes, almost speak again in our schoolrooms. Exit readers—enter Longfellow and the band of sweet singers and historians. Exit grammars, rhetorics, composition books. Enter the real masters of these arts, with teachers who have followed and caught the spirit and mantle of these masters. Exit all that dulls the mind, blunts the spirit, deadens the soul, and cripples the will. Enter master minds, wills, spirits of the past through your written page. Enter library, with your life giving educative power into every schoolroom and home in our land. This ye will do when teachers know your power and lead the way.

The next and last papers on this theme before this association were given 11 years ago. In the paper on the use of Libraries in the Public Schools, and the Teachers' Relations Thereto—Rep. 1877, p. 311-321—by Prof. I. N. Demmon, the importance of libraries in schools is enforced by a quotation from Carlyle, and by reference to the work of the Boston public library, established "To become the crowning glory of the public schools." The paper also makes these points: (1.) The teacher is the natural guide to the pupil in the choice and use of books. (2.) The school libraries of the State are practically in the hands of its teachers or may be for growth and right use thereof. Then follows a list of book helps. Finally the paper has a half dozen suggestions on the use of libraries: (1.) Cultivate a taste for good reading. (2.) Choose books within the pupil's power to understand. (3.) Avoid many of the juveniles much sought. (4.) Use periodicals, magazines, etc., sparingly, and only the best of fiction. (5.) Direct reading on text-book work, especially for the brighter pupils. (6.) Keep rapid workers busy with extra reading. The paper ends with details of an experiment in library use for schools, at Huntington, Indiana.

Professor W. H. Payne gave the topic "Hints on the Importance of Libraries" very scholarly and philosophical treatment, before the association in 1878, p. 152-156. This paper has little on the theme before us. The discussion of the paper by Prof. I. N. Demmon and Supt. W. S. Perry, especially Supt. Perry's suggestions, are full of inspiration on this theme. Prof. Chas. Carlyle's paper on Reading—Rep. 1887, p. 40—has also good suggestions in point.

This brings us historically and logically to the character of school libraries. One single sentence sums all reports. Prof. Payne says: "The great

vice of our public libraries is undoubtedly the superabundance of fiction, and often of fiction of the poorer sort."

Against the libraries as to quantity the reports for the last 20 years abound in strictures of the gravest sort. Supt. D. B. Briggs, in his report for 1877, commenting on the condition of the school libraries for the ten years then ending, has a fair statement of the case:

"There is no feature of our public school system that offers so little encouragement for boasting as that of the school libraries. * * * Their poverty is in the means that come to them. * * * One-third of the counties appropriate nothing, 12 more make trifling apportionments, and the balance, two or three counties excepted, make apportionments barely worth mentioning."

From 1867 to 1877—years of financial depression—our "double-headed" school libraries in this State increased about 7,000 vols. annually. The increase for 1877 was 24,000 vols. The annual increase since has been about 20,000 vols. The present number of vols. is about 444,000; but the rate of apportionment by direct taxation since 1877 has decreased ten per cent. Hence the above mentioned increase is due mainly to an increase of penal fines of one kind or another. In other words, as wickedness doth more abound, our school libraries, this fair goddess of poetic justice, doth more abound.

By the report of 1888, there are 1,228 townships and districts reporting libraries, or 40 fewer than in 1880. There are 7,087 existing districts, 447 use library money for general school purposes, 244 forfeit this money, and over half the districts have no library advantages. Brethren, these things ought not so to be. Can not some teacher in each district see that its best citizens are stirred up to see that every cent of library money goes straight to its statute destination, in spirit and intent? Then see that good books are bought, and that each book is used for all it's worth. One good book well read, digested, absorbed, what a tale would be told were its influence fully and truly depicted!

We now come to the essential point of this theme, the use to be made of school libraries, or, as I prefer to state the case, the library in the schoolroom. On this work should be concentrated steadily the best thought and effort of this association, the thought and effort of every true teacher. No school work will need more courage, wisdom, intelligence, tact, and vigor. And no school work will yield a larger reward.

As you have inferred, my views on the best use of the library in the school-room are more radical than you may deem useful. The general principle I base them on is this. Books are useless, save as they guide to right action, right living. Mere book worship, mere reading hunger, is a dissipation. To hear is to obey, pointedly describes the model soldier or sailor. To know is to do, as fitly points the model life. The Bible's cardinal fact is God incarnate, a concrete life, its spoken and acted message. "Go, do likewise." "Be ye perfect as, etc." Or as the poet says:

Act, act in the living present,
Heart within, and God o'er head.

Christianity or anything else is powerless save as it is lived. Hence, I have placed first the living, acting, stimulating teacher, arousing and guiding the child to observation, effort, noble life. Then books enter as final

aids, and only as they aid is their use desirable. Any scheme for the use of books that lacks this largest purpose, violates the foregoing general principle to whatever extent it lacks a clear, feasible, stimulating, and natural purpose.

The following is an outline of a plan that has features adapted to general use, and can be enlarged to the best use:

1. Make a careful and steady study of library resources at hand, whether public library, school library, or other obtainable books.

2. From these sources make a careful selection of books suitable for circulation and use in the schoolroom. List and number their titles.

3. When possible, place this selection in the school room, under your personal direction and supervision. Otherwise classes or individuals may use this selection in the library or in private.

4. Give systematic guidance and training in the reading and use of this selection.

5. See that this selection grows from time to time in quantity, quality, and adaptation of individual books to individual needs.

6. If the books are for character purposes, choose them after personal reading, or with the same care you would choose a friend or life companion. If the books are for reference and later use of matter, see that they are the best of their kind, authoritative in substance, pure and chaste in style.

Having started your list, give it to each pupil and allow him to select a book for reading. If you think he has not chosen wisely, choose a book for him, going outside your list if the pupil's need requires it. Do not allow a book to be returned without being read, or if read too hastily. One, two or even three weeks may be necessary for proper reading of a book. Give the pupil to understand that he is to give a satisfactory account of his reading. Have him record in a blank book of his own an abstract of each book he reads. He can make the abstract with the book at hand, thus obeying the law of fixing ideas in mind by writing them. Have him, as often as possible, give an oral off hand abstract of his written abstract, as you call for any one, thus training him to have his resources at instant command. Equally often have him write an off hand abstract of any previously abstracted book, thus giving chance for fuller and preciser detail than oral work affords. Each pupil should be ready to be called upon at any time.

In the special training work, lead the pupil to discovery of the purpose and use of title page, preface, table of contents, and index. Where possible, lead to skill in the analysis of books. Encourage a pupil, by comparison of his earlier and later work, pointing out gains in grasp, point, freshness and felicity of expression. Encourage to effort in time, pains, and perseverance. Enforce the principle that not the number of books abstracted, but the thought power gained, is the true measure of advance and success. Encourage the use of similes, metaphors, illustrations. The extent to which this plan is carried will depend on the teacher and the pupils.

I close this paper with some suggestions and observations.

1. This scheme, or any that can be devised, will lack as the teacher lacks fitness, intelligence, will and courage to operate it.

2. If pupils are not led to make further use of books read and abstracted than merely reading and abstracting them, the plan will not lead to the largest and consequent benefit inherent in the application of the general principle.

3. This scheme is suited to any view one may have of the place and value of the library in the school room, libraries large or small, books few or many, and meets the wants of a teacher who would grow into this important work.

4. The plan goes home to the intelligence of the pupil, is suited to his needs in time and condition, leads to a lively interest on his part, lays the foundation for his right use of books through life, fosters the habit of being an intelligent reader and user of books, and has no tendency to leave him a specimen of "arrested development."

5. If it be objected that this rigorous control and supervision of the pupil's reading is opposed to real and abiding interest on the pupil's part, effort in this direction shows the objection groundless. As to the need of such control and supervision, read G. E. Hardy's "The School Library, a Factor in Education." Emphasizing the harmful quality of most literature for the young, he characterizes its work as "The Rape of the Innocents."

The library in the school room, the key that unlocks and sets free from the narrow prison of text-books, the grand portal to scholarly love and habits, the highway to broader mind in grasp of facts, in range of thought, in practical intelligence! May this seed of our youth, this sword of our prime, this solace of our age prevail more and more!

GENERAL DISCUSSION.

SUPT. E. M. RUSSELL, Battle Creek :

Mr. President, and Fellow Teachers : While your inclinations are calling so loudly toward the dinner table, I will not detain you long.

I cannot invite you, as the gentleman who preceded me has done, to come to a beautiful building, to come to its dedication, but I can invite you to come to an average room in Battle Creek, where there are books everywhere; the books are badly worn, not shelf worn either; I will be glad to meet any of you there at any time, and let you see how we use the library. You will simply see what we have and what we are doing.

We have a library of between nine and ten thousand volumes; and in the last year there were forty-five thousand volumes drawn. Three-fifths of those are for use in the public school, by the pupils in the schools. Our library is devoted : 1st. To Art, three-fifths per cent. of the volumes. 2d. Biography, thirteen per cent. 3d. Education, one and two-tenths per cent. 4th. Fiction, eighteen and one-half per cent. 5th. History, eleven per cent. 6th. Juvenile, sixteen per cent. 7th. Mental and Moral Philosophy, one per cent. Periodicals, three per cent. Poetry, seven per cent. Political Science, one and seven-tenths per cent. Religion, two and one-tenth per cent. Science, six per cent. Travels and Description, seven per cent.

I have given this as on the point of the *character* of the library, not as what a library should be, but as what our library is. There are some things I would criticize about it, and yet I feel, in the main, there has been an intelligent committee doing the selecting. I would like to see added to this library some text-books. I cannot agree with the gentleman that the text-book should be thrown out and the library take its place; but I believe the text-book should be the skeleton, in which the library will fill out the brain and the heart, the muscle and tissue. I would have a department of text-books there in duplicates, so that, when we wished to change the line of work, we could go into the library and take other books, and thus broaden our work in every line. I would like to give you a little idea as to the number of volumes by authors that we have, if I

had the time, but I have not. But we have a large number from Longfellow, Whittier, Emerson, and all these princes of literature; but at the same time we have a large number by such as Oliver Optic.

As to the use of the library, I have written down at the top of my page, "Bring the mountain to Mohammed;" but the gentleman who preceded me has touched upon this, so we will leave it.

I have put down here, *special places for books*. I would assemble a reference library, for the use of all in the high school, right under the eye of the principal and teachers.

2d. In the reading room. We have many periodicals and books that have been prepared by our pupils in other years, lying in the reading room.

3d. The reference library in the Superintendent's office. There we have cyclopedias, and a large amount of supplementary reading; also books on political science; that when a pupil is asking, "Where can I read this or that," we have something at hand to which we can direct him.

4th. Changing table library in every room. This is a reference library, which is changed whenever the topic studied is changed; the reading is all done under the eye of the teacher in that room.

5th. Library proper, *in or near the central building*. We have ours in the central building. Come there at any hour of any day of the week and you are sure to find some of the students in the library consulting the books; and while they have all the advantage of the reference library of the high school, of the reading room and of the table library, they still like to congregate in the library itself and handle the books, "absorbing knowledge through their finger tips."

Then there are special *times* as well as *places* for books.

1st. Library Days—The pupils of the different rooms of our central building have their regular times for going to the library; each ward school has its library day. Such a day is number four's day, such a day is number two's, etc.; and some of the pupils themselves bring the books that have been at number four or number two; they have a little wagon for the purpose, and they give the books into the hands of the librarian. They consider it a great privilege if they are allowed to go to the library.

2d. Reading Room Days—Our reading room is in connection with the high school, and yet I have taken this plan. Each of the lower grades down through the grammar school has its regular day, when it has the exclusive privilege of the reading room after 1 p. m. Thus we have our reading room days.

3d. Reading Hours—When lessons are learned we have special times when the pupil may lay aside his text-book, and read in the books of the table library.

4th. Friday Afternoons—We believe in making Friday afternoon a time in which the pupils may have some special privileges aside from routine work, and so allow some time for reading from the table library.

5th. Teachers Reading to Pupils—The teachers, from these books, read to the pupils very largely.

I would have some special plans:

1st. The Plan of Cyclopedia and Dictionary Work—Let the teacher call up a special topic, and set the pupils at work at the cyclopedia or dictionary.

2d. Our Masterpiece Work—We have masterpieces all the way through, from the primary (and somewhat in the primary), in supplementary reading; and we are preparing some special supplementary reading ourselves. I believe these supplementary readers should be considered as a part of the library, not simply text-books. In our

science work, the teacher directs the use of this table library. When we bring up any particular line, the teacher watches the reading on that line.

I wish to bring out a point we are introducing in Battle Creek; it touches history as it has been touched during these sessions a little. I have instructed lower grade teachers to give the pupils stories, and let those stories be connected. Give first the story of Columbus, then of Eldorado and the Fountain of Youth, etc. Tell them the stories and then let them tell them back; and follow up this through the third and fourth grades, and even higher. We have taken from the Youth's Companion the parody on the "House that Jack Built," giving the story of Columbus, and have adapted it to our pupils and struck it off on the mimeograph. They are seizing it with avidity; they love it. Now, we have Eldorado and the Fountain of Youth; further up we have the story of the Cross in the Wilderness. Usually the heroism of the Jesuits is left out, and the Puritans alone, are exalted in history; but I believe there was just as much worthy of praise among the Jesuits and Recollects, as among any class in American history; and I am glad to stand here this morning and pay honor to these men. So we teach them the story of the Jesuits. We bring in the story of Puritan and Catholic, of patrician and plebeian. Let this be a part of the childhood teaching, give them a little on this line, and create a hunger for this kind of reading; and if we create a hunger in childhood, it will take care of a large part of their reading when they are older.

3d. Science Search in Connection with the Museum—I believe we should have a museum as well as a library. Let the curiosities be treated as a part of the course they are studying in science; get their curiosity and interest awakened in these things in the museum, and tell them where they can read all about them. We have some beautiful corals in our museum, and it is a pleasure to let the little fellows in to see them, and to tell them where to read of them. Let each teacher have book talks; talk to them about the books they are reading.

And now, the gentleman spoke of the teacher having supervision in the selection of the books the pupils read. I wish to speak of one other point, and that is, I believe the superintendent should have, from time to time (and let those times be pretty close together too), a report from each pupil, especially in the higher grammar grades, of every book he has read.

Now, I believe if we use the library in this way, bringing it into the schoolroom, making it a part of the every day work, telling these stories, and then telling the pupils where they can find them afterwards, that it is making the library a living, active force in the up-building of education and of character.

THE EXPENDITURE OF THE EDUCATIONAL DOLLAR.

SUPT. E. T. CURTIS, CALUMET.

The topic assigned to me on the program is certainly an engrossing one as the world goes. Who does not care for dollars? Who is not interested in their expenditure? Who knows the value of dollars better than teachers?

Do we not count their cost in nerve, in patience, often in weariness and discouragement? We know, too, the delights dollars can bring in travel, books, leisure and rest. Let us then devote some special consideration to what absorbs so prominent a share of our daily attention.

At the outset each may beam with satisfaction that we live in a land where dollars abound and where people do not hold them back from good enterprises; that we live in Michigan, whose annual outlay for education, as shown by the last published report, has reached \$5,236,800.

This magnificent sum, almost too great to be readily comprehended, is what we desire to specialize as the *Educational Dollar*. Given by the people or the State round, handsome and full in value, it is to serve a noble purpose ere it again becomes the people's dollar.

It is the annuity of the commonwealth to her children, designed to bless both her that gives and them that receive.

Those entitled to its direct benefit number 629,923. It has built for them 7,428 schoolhouses, many of these stately as well as durable; all a guarantee of faith in the permanence and value of our system of education,

At least 19,815 school officers keep check upon it in 6,605 ungraded districts, while 2,892 more in the graded schools round up the number to 22,707, each bound to see that the dollar is properly spent. Lastly, 11,990 ladies and 3,773 gentlemen, presumably educated, zealous and competent, minister day by day to the more immediate wants of the youthful beneficiaries.

How complete the system? Can it be possible that with all these provisions the educational dollar comes back to the people clipped, mutilated, shorn of its power or diverted from its purpose?

The statistics of the State educational department, gathered with much labor, get too little attention, we fear, from citizens, law makers, and perhaps from teachers.

They show that of the 629,923 who should share directly in the benefit of the educational dollar 204,705 do not take the gift at all.

In other words, about one-third of those enrolled in the census are not enrolled in the schools for any part of the year. Then, as if this were not bad enough, the average daily attendance of those who do enter the school is only $67\frac{1}{2}$ per cent. of the enrollment. Nor is this matter constantly improving, for the statistics of 1888 compared with those of the preceding year show a decrease of $2\frac{1}{2}$ per cent. Do you say that could this be changed the fact would call for a proportionate increase in expenditure?

We refer you again to the figures for 1888, which show that 535,948 sittings were provided to accommodate an average attendance of 287,022 pupils. No doubt nearly all of these schoolrooms were supplied with instructors, warmed, furnished, and ready for business that could have been better done had the seats been filled. Of course we need not expect that all children of school age will attend, nor can attendance possibly be perfect, but that 54-100 of the children and youth should be absent from the public schools where provision is made for 85-100 is a matter of the gravest importance, and almost beyond belief. Such, however, is the fact, and after making allowance for duplication and all discrepancies it appears that the educational dollar comes to the teacher's hand clipped of two-fifth of its value, if not cut squarely in two. How far we are responsible for this, and what we can do to better it, are questions which demand attention in the further development of our subject as related to the direct influence or control of the teachers themselves.

We may be aided by the statement of some things which all admit are necessary to good results in education:

I. There must be an intelligent adaptation of means to accomplish the ends sought.

II. Educational appliances must be used for an extended period.

III. There must be continuity in the educational process.

IV. There must be harmony and concentration of effort on the part of all concerned.

How do these principles hold in practice? Take first the ungraded schools, wherein the hearty sons and daughters of our rural population assemble. What is the adaptation of means to ends in the white school-house at the corners? Many of us need not depend for an answer on observation alone. Have we not been there as teacher or taught? Do we not know that in many of our districts an almost endless succession of beginners, experimenters, or rut-followers occupy the places; and when a live, progressive, competent man chances to engage, what then? Why, get rid of him, because, like the Great Teacher, he tells the truth as to the real state of things, and employ some one who promotes everybody, and makes a show of progress as unreal as his own manhood, or some relative of the director, or some needy person who must be provided for. And the pupils—what of them? A score or two of the younger ones begin the term, a few to be prompt and regular, more to be otherwise. One by one the big boys come dropping in, as corn-husking or chopping permit, each ready for a tilt with the new master and bound for the fifth reader class or to know the reason. And Susan Jane and the other big girls—do you think they come for study? The whole crowd are as full of rollicking life as an egg of meat. What a mix out of which to bring good educational results, but it can be done, and often is done.

The ungraded school is above all others the place for individual instruc-

tion untrammelled by the tendencies to mediocrity incident to dealing with masses having about the same degree of advancement.

The rural pupil, when he once sets himself to work, knows what work means, and for such the educational dollar is not spent in vain. Thousands, yearly, under the impetus given by personal contact with some earnest instructor here gain the knowledge necessary for good citizenship, or go to avail themselves of the better advantages of the graded school. There they find an improvement in organization, a division of labor by larger grouping, more intelligent supervision, better opportunities and usually better instruction.

Yet the very provisions of the graded school course often disappoint those they are intended to benefit. Much of the work is outlined to conform to an ideal rather than a real set of circumstances. It presupposes an amount of schooling which very few of those who attend can undertake. In this very city of Lansing, with all the favorable circumstances, only eight per cent. of the pupils enrolled are in the high school. Suppose this to be a fair showing for the State at large. Deduct from this the percentage that will fall out by the way and we may find that perhaps five per cent. of the pupils complete the high school course. The ninety-five per cent. are those that need especial consideration in educational expenditure. For the few who only finish the grammar school, or the many who do not even enter it, how meager is the preparation for self help; with how very few is the desire for such help inculcated. Their limited acquirements resemble too much the parts of a machine that remains unfinished instead of a tool with which to work out new results. We do not in the least decry high schools nor courses of higher study, but plead for better provisions for those whose opportunity ends with the fifth or the sixth grade. Nor are our graded schools free from empiricism and too frequent changes in administration. How rare are the instances where a teacher or a superintendent is requested by a school board to prepare for his successor a record of the standing and classification of his pupils. When the outgoing head has heart enough to do this unasked his report is frequently ignored by those concerned so that in spite of catalogues and printed lists the continuity of effort is often broken. Again, a very great lack in our schools is that of training. In the haste to complete schedules and text-books we forget the importance of the *way* in which the child works, or fails to work. By training we mean the education of mind and hand to correct and vigorous action; training to form habit, fixed habit that shall be an unconscious power for good, as well as a conscious aid in effort. Training to study, to fix the attention. Training to skill; to accuracy; to thoroughness; to quickness; a desire to know the *why* of what is done and to have a purpose and then strive for it. Training in self-control, self-reliance, and patriotism. These are the things the pupil needs, and the educational dollar fails in its mission if he does not get them.

But a truce to faultfinding. In spite of defects, our schools are doing a noble work and are a source of just pride. We would by no means undervalue them. We only wish to suggest partial remedies for some evils.

Can aught be done to secure a better adaptation of means to ends; of the educational process to the needs of the pupil?

This it would seem must be brought about, if at all, by the inculcation of higher ideals in the minds of teachers and by the enlightened coöperation of school officers and parents. To effect this is a difficult, but not

impossible task. We must organize, we must agitate, we must spread the truth by voice and pen. Above all we must illustrate, each in his own place, the excellence of better methods, that others catching the enthusiasm may emulate the example.

And here we believe an enlargement of the resources and labors of the highest educational officer of the State, the Superintendent of Public Instruction, is an essential factor. Cannot teachers secure the passage of amendments or appropriations to enable this officer to have a far greater influence in shaping the educational policy of our commonwealth? Who doubts that this would be the result if teachers should undertake the matter? They are not politicians but they are distributed everywhere and can use much influence in a good cause. Here is a field for enterprise easily filled that will yield good returns. Let us enter it when opportunity offers, and thus add to the usefulness and influence of the department under whose auspices we labor. Again, we may improve our plans of study so that those who can and will undertake the full course may be separated from those who cannot. We could have a shorter or more condensed course for the latter, or better still we could bring the rudiments of the sciences within the reach of the grammar or even the primary grades. There is in most schools a large number, probably one-fourth of the enrollment, of pupils who on account of irregular attendance might be better treated in separate or ungraded departments. This would serve the following purposes:

(a) It would allow for the consideration of the special needs of those not able to take a full course.

(b) It would permit temporary or even frequent absence without total disruption of the work.

(c) It would admit of special preparation for the regular classes, by those who are backward in some studies and advanced in others.

(d) Here, by trial, the real status of a pupil could be tested before assigning him to a permanent place in the school.

(e) The regular classes, freed from the incubus of drones and truants, would make better progress.

Of our second principle, that educational appliances must be used for an extended period, this, at least can be said: The average term of school life can be increased by making school pleasant and successful, and still more by the personal influence exerted with parents and pupils to that end. Very many leave school from lack of interest rather than from necessity. Many more choose to leave because they do not value sufficiently the advantages of an education.

Who shall rectify this if not the teacher? Let such pupils be sought out even after leaving and a hold be kept upon them that may win them back again. Or let kindly advice suggest plans of study, such that the vagrant may not wholly wander from the educational field. The relation of the parent to this work will be treated later.

Although laws regulating or compelling attendance have proved thus far nearly inoperative, yet is not this due to defects in the laws themselves rather than the principle involved? We yet hope to see an awakening to the importance of these measures. The people seem to us too indifferent as to whether the money they supply is used or wasted. Must not the impetus in this direction also come from the teachers by whom the disastrous consequences of irregularity are most felt. Let us try to bring this matter of

non-attendance and irregular attendance before the public until the laws we now have, or better ones, shall be enforced and the educational dollar be shared by many who now slight its benefits.

Thirdly. What can be done to secure continuity of study? This topic has been already partly discussed. It is of so much import as affecting educational expenditure that it seems strangely neglected. In order that there may be continuity there must be unity of administration. In our system this is especially lacking. We have very frequent changes of both school officers and teachers. This certainly should suggest that some plan be devised to ascertain and record the progress of each pupil, on the basis of a standard fixed by enactment; a standard moderate in its requirements and broad enough in its terms to test at all points the pupil's ability. This should be a State or a county affair, or, at least, removed from the interference of those directly interested. It should cover the steps essential to progress, meaning such degrees of acquirement as would enable the pupil to take the next degree, or departure, in a given line of study. These tests should be made by law a matter of public record, and school officers should be obliged to heed the same in the performance of their duties. No teacher should be permitted to draw his salary at the close of the term of his engagement without furnishing to the board, in due form, the standing and classification of each pupil that has been under his care during the time covered by the report. It should also be the duty of the director to see that this classification is made the basis for the new term's work, subject later to such changes as circumstances require.

Lastly. There may be a better coöperation on the part of all concerned in educational matters.

This, of course, must be brought about by moral and social means; largely by the teachers; and as we have the remedy for dissensions in our own hands we should not be slow to apply it. Why should any teacher consider school officers or parents his natural foes or lacking interest in what so nearly concerns them? Let us show ourselves 'worthy to be trusted if we want more coöperation. Let us feel more interest in pupils, and parents will show more interest in our work. Let us be citizens—active members of the society in which we labor, so winning confidence and esteem. And let us remember that popular uplifts are slow, so, while never content, let us never be discouraged nor give over our efforts to have every dollar of the people's money we help to spend reach the right spot and do the right work.

GENERAL DISCUSSION.

SUPT. W. C. HULL, Albion :

Mr. President, Ladies and Gentlemen: The paper to which we have just had the pleasure of listening, and from which we may expect decided benefit if we apply its ideas, is upon a subject seldom discussed by teachers, except in the general way that all pedagogical discussion applies to the educational dollar. Not only do teachers neglect the subject, but also the educational journals. It is not more common for teachers or educational journals to discuss the best use of the educational dollar than for any other class of people or periodicals. The only phase of the subject which receives its due attention is the inadequacy of the educational dollar as applied to the salaries of teachers. All public work is performed through the treasury, and the teacher who is

interested in the public good must be interested in the means by which it is accomplished. The disposition of the educational dollar is as largely influenced by the teacher as by any one, and in expenditures for apparatus and appliances the matter is usually left to the independent judgment of the teacher.

Good financial judgment will elevate the teacher in the mind of the business man and insure him the trust of large interests. Business ability will secure financial aid to the teacher's plans. Hence the use of public money for educational purposes should be a chapter in the incipient science of pedagogy.

That the educational dollar is not used with mathematical accuracy is conclusively demonstrated by the single fact that the cost per capita for education in like cities and districts varies so widely as it does, while the standings of the students may be accepted everywhere as equal. It is not less reasonable that there is an undiscovered remedy for this state of affairs.

Whatever unnecessary discrepancy there is between the school census and the daily attendance is due in some measure to over-pressure, so called. Pupils who are over-worked to keep up with their classes, or who fall behind, often drop out of school. It would be more proper to call over-pressure over-grading. The grading of the public schools, with few exceptions, is for the ability of the brightest pupils, and is above the ability of the average. Instead of permitting the ability of the pupils to establish the work to be done in the several grades, the Superintendent erects the standard of some city which has three or four times as many pupils in its first grade as in any grade above the first. All his pruning consequently must be at the foot of the classes. Usually from ten to twenty-five per cent. of the pupils are below passing at the end of the year and must be put back, while not one per cent. are promoted in advance of the class. If the work were for the average pupil the per cent. of the class put into the grade below for deficiency would not exceed the per cent. of those put into the next higher class for excellence. Moreover, if reward is as potent an incentive as punishment, the reward of promotion should be as often resorted to as the penalty of demotion. This would certainly remove all cause of complaint of over-pressure, for it would establish an honest course of study, corresponding with the ability of the average pupil. This, however, cannot apply to professional schools or colleges, for the standard of excellence in the professions should not be established by the candidates who happen to seek a degree. But the public schools, which are the property of the masses, and are patronized by the masses, should conform to the needs of those for whose good they are established.

It is ten years since the famous article by Richard Grant White appeared in the North American Review, on "The Public School Failure," in which he said: "There is not an institution of the United States so unworthy of either confidence or pride as the public school system; not one which failed so completely to accomplish the end for which it was established. * * * However great may be the intrinsic value of education as a formative social agency, the effect of that which is afforded by our public school system has proved in every way unsatisfactory and worse than unsatisfactory. * * * Crime and vice have increased with the public school system." At the close of his attack he suggested as a remedy what is to-day the teacher's most popular theme, manual training. This may be the solution of the great question; the means by which the success of the public schools will be made sufficient to satisfy even such as White. That the subject of manual training enters into the discussion of the educational dollar is apparent beyond the mere cost of its introduction. Scarcely any invested capital is actively employed, so small a fraction of the time as is the school property. Interest

on money accumulates night and day, seven days to the week, without regard to the religious inclination of the lender or borrower. Railroads employ their lines twenty-four hours a day the year around. Factories, mills and foundries are busy night and day, while a year of school is equal to less than seven weeks of constant use. In many schools the tendency seems to be to shorten still more the already too short school hours, and thus add to the odds against which the success of the school has been attained. While it is altogether probable that the time of sedentary study may not be increased without risk of more serious consequences to the pupils, yet it seems quite as probable that a time of directed physical activity may be added to the present time of study and the result be, not only the use of the school property for a more reasonable length of time but the improvement of the schools in proportion to the increase of time. Another means of making the school buildings productive for more hours per day is by holding night schools.

The Popular Science News recently stated that the expense of conducting the public school system is incommensurate with the results secured. To arrive at such a conclusion it is necessary to neglect the fact that the public school has but a comparatively brief history. To arrive at such a conclusion it is necessary to forget the hardships and privations our parents endured to secure their education. To arrive at such a conclusion it is necessary to ignore the marvelous advancement of America, the nation of free education; the dividend of the invested educational dollar. But while we may be well satisfied with what has been accomplished, it is well if we are wise enough to know that not even the present is secure without an earnest, constant effort to make a better future than any success yet recorded.

SUPT. MILLER:

I would like to ask the gentleman if he included in that estimate, the students that are attending colleges throughout the State? I want to say further on that subject, it seems to me we have the secret of why so many pupils drop out of school. I know in my own observation, it is very seldom a pupil is displeased if he is advanced in his class; in fact I do not know of one ever having staid out of school because he was advanced; but I do know of many who have staid out because, at the end of the year they were not promoted with the rest of the class. I think we should make some arrangement whereby advance is within the reach of the average scholar. We would then do away with a great deal of friction. It occurs to me, Mr. President, this is a question that ought to receive careful consideration.

PROF. GRAVES, Petoskey:

It is very proper, as has been suggested this afternoon, that the practical results of school work be measured in the standard of dollars and cents, because it is there that the people will measure them, it is there that the standard is fixed, it is there that business men and men deep in the affairs of the world, will estimate the work of the public school. It is no light matter when school work calls forth the words which have been quoted here this afternoon from such men as Charles Francis Adams. Doubtless these expressions are all overdrawn; doubtless very much is laid to the charge of the common school that does not belong there; but, during the last year, I heard a very keen observer in the line of school work, Charles S. Hampton, make the remark that he believed three-fourths of all the time and money and energy expended upon the public schools is wasted. Doubtless that is somewhat overdrawn, but if we cut it down to one-half, and consider the fact that \$5,000,000 a year is expended, as has been stated this afternoon, what an immense outlay we have for which there is no commensurate return.

But the question is addressed not so much to us as to the great body of workers who do not take interest in educational matters, who are beyond all the exhortations we can give here. I think law is not the panacea for all the evils to which society is heir, but I do believe that along the line of school law we can do very much. I cannot fail to observe that there is a decided break between the State Superintendent's office and the actual working of the schoolroom, a break that does not occur in some States. Those of us who have paid much attention to the preparation of the common school teacher have seen that the questions sent out by the Superintendent of Public Instruction have invariably called for instruction on the line of the questions. Now, my thought is this: As our laws now stand, the Superintendent of Public Instruction is purely an educational clerk. In the State of Michigan he has no vital power; upon even the common schools of the State, he has no vital influence; the graded school is entirely beyond his immediate control and supervision. I believe if we would assist in the saving of the educational dollar, we should have the power of such men as the one who now stands at the head of Public Instruction in Michigan, extended so that they will have authority to say: "You shall employ men not presumably competent, but competent, as teachers; not presumably prepared for their work, but prepared for their work; not presumably posted, but posted." I recognize as the educated man the man who is thoroughly prepared, although it be entirely by his own efforts. But I believe that the Superintendent of Public Instruction should be able to reach down even to the graded school board with something of a mandatory power. Then how easily you can touch the county superintendent or, in the township system, the township director, etc. We can accomplish this by educating the people; we can do it by moving forward in our work. The governor said the other day that we should not criticise the school laws too hastily, nor would we; but it is a fact that when the last county secretary law was passed, it was but a compromise. Let us move forward in the same direction; let us be politic, as the governor advised. It is true that a teacher cannot directly influence politics, but through her personal influence she can work for laws that shall enlarge the authority of our public officers. We have had for years the strongest kind of men at the head of our educational system; men competent to exercise authority. They should receive salaries commensurate with the duties, and they should have some mandatory power. In many States they have great power. In Massachusetts the provision is something like this, I give it as nearly as I remember: "All towns of 1,500 inhabitants must maintain a good English high school." Are there any towns in Michigan of 1,500 inhabitants that do not maintain a good English high school? We know there are. "Every town of 2,500 inhabitants must maintain a good English high school where Latin must be taught in addition. Every town of 4,000 inhabitants must maintain a classical high school." And this is mandatory by the law of the State.

SUPT. CHURCH, Cadillac :

It seems to me it is common for people to rail at the public school as a sort of outlet for their general ill feeling. If they are feeling badly about something and don't know what to attribute it to, they look around to the public schools and fire at them. And when Richard Grant White, or anybody else like him, calls the schools to account because he says that the percentage of crime is on the increase, I say you might as well call our system of courts, and our system of police, and our system of legislature, and all our other systems to account and charge them with the grossest failure. Might just as well say our laws are a failure because men go wrong; we might just as well say Sunday schools were rank disgraces because boys come out from them and go bad;

you might as well say the whole medical profession was useless because disease is sometimes rampant throughout the country. We have been told that school property is in use but a very short part of the time. So is this State house in use but a very small part of the time; churches and Sunday schools are in use but a very short time. Go into the weekly (it should sometimes be spelled the other way) prayer meeting and see how small a portion of the church are there. We cannot balance all those things on a money principle. Certain forms of work cannot be pursued for the same length of time that others can. When I used to work on a farm I felt just like work; I wanted to work ten or twelve hours a day; but I have found, in college work, we cannot put in that time. The same thing is true of the pupil. I am fully in accord with the sentiment that says a good deal of advantage might be gained by having a system of industrial occupation connected with our public schools. A large proportion of the boys who make a moral failure in the State of Michigan are doing so from the lack of a wholesome amount of good hard work to do. Parents' great concern is, "What shall I do with my boy when he is through with his education to keep him from losing and demoralizing entirely?" I say, give him good hard work with wholesome company, work enough so that at night he will be tired and ready to go to bed; that is the best moral corrective I know of.

SUPT. HULL:

I wish to ask the gentlemen whether we were to understand that he objects to the longer use of the school property if, by using it a longer time, the pupil may be benefited?

SUPT. CHURCH:

Not at all. But because some communities are not able to do so, it should not be interpreted as a slander on our schools.

SUPT. H. N. FRENCH, Kalamazoo:

Let us not forget that we cannot measure spiritual educational values by material standards. There are some things not measureable by days, or yards, or pounds. I suppose this is a discussion on the best way of expending the educational dollar.

SUPT. SINCLAIR, Belleville:

I think the family has a duty to perform as well as the school, and the school has no right to usurp the place of the family. It is the business of the school to give the boy an education; it is the family's duty to teach him to earn his bread and butter. Money draws interest night and day; the educational dollar goes on. Our work can never be measured by dollars and cents.

DR. P. P. FIELD, Detroit:

I have been very much interested in some of the points brought out in this discussion—notably the suggestion in regard to more physical training in our schools. It has been my pleasure, during the past ten years, to come in contact with many school teachers in the eastern and middle States; and, from my observation of their condition, and that of the various pupils where I have been, I conclude there is a great lack of physical culture in the schools of these different States.

Another idea suggested in one of the papers was the policy of making a longer use of school buildings. I have been putting that matter to a practical test, as I have used in outside work in physical culture, in connection with the school teachers or pupils, school buildings outside of school hours in some twenty or more cities in the eastern and middle States, and have been refused the use of but one building in any State. This

indicates that there is a desire on the part of school boards of education to have the schoolhouse property within their charge used for practical purposes outside the usual school hours. So far as the use of church property is concerned, many churches are to-day paying competent instructors for physical as well as moral and intellectual culture. It is a great step in advance. There is much growing interest upon the idea of physical training.

THE OBJECT OF A COLLEGE EDUCATION.

PROF. A. E. HAYNES, HILLSDALE.

I can not introduce the discussion of this topic more appropriately than by voicing the prayer of Dr. Holland :

"God give us men! A time like this demands
Strong minds, great hearts, true faith and ready hands;
Men whom the lust of office does not kill;
Men whom the spoils of office can not buy;
Men who possess opinions and a will;
Men who have honor,—men who will not lie;
Men who can stand before a demagogue,
And damn his treacherous flatteries without winking!
Tall men, sun-crowned, who live above the fog
In public duty and in private thinking."

Such men are an honor to any college, and to the development of such its efforts should tend. True education consists in the generation and symmetrical development of useful and right habits of body and of soul, combined with such knowledge and motives as will lead to a wise use of these habits. The proper exercise of such habits leads to the highest success in this life and is, therefore, the best preparation for the life to come; while it renders their possessor a blessing both to himself and to others. The results of such education should show themselves in two directions, physical and psychical,—a stronger body and a more royal soul. Such education involves high purposes and a wise activity and an unbending resolution in steadily striving to accomplish them.

In defining habit, Dr. Webster says: "Habit is an internal principle which leads us to do easily, naturally and with growing certainty what we do often;" while Dr. Carpenter enforces the same idea and outlines the entire philosophy of habit in the following brief sentence, viz: "Our nervous system grows to the modes in which it has been exercised." It has been said that a child is a bundle of possibilities, and it may, with equal truthfulness, be affirmed that a man is a bundle of habits. It is often remarked that habit is a second nature, but I prefer the statement of the Duke of Wellington, who is said to have exclaimed: "Habit a second Nature! Habit is ten times Nature." As to the transcendent value of right habits there can be no question. Some

of their benefits have been expressed by a recent able writer in the following statements:

1. "Habit simplifies the movements required to achieve a given result, makes them more accurate, and diminishes fatigue."

2. "Habit diminishes the conscious attention with which our actions are performed."

While all habits originate in the mind or soul, yet the connection between the body and soul is so intimate that a bodily habit once thoroughly developed may so react upon the soul as to even become its master in the special domain in which it thus reacts, and so may either hinder or assist the soul in its operations. It is only when the body and soul are in complete, symmetrical, and righteous harmony that the fullest success of the individual becomes possible.

To bring into being and judiciously develop, or, if already existing, to develop such habits and harmony as I have already mentioned, and, when lacking, to inculcate the knowledge and motives necessary to their best use, should be the principal and constant aim of a college education.

HABITS OF BODY.

The human body is that splendid mechanism, "fearfully and wonderfully made," through which, during our earthly existence, we get our impressions of the universe, and by means of which we make impressions upon it. It is a glorious gift of God, and it is a part of true religion to sacredly care for it and a part of true education to teach us how to do this. Pure thinking is the first requisite of good health, both of body and of soul; cleanliness is not next to Godliness, it is a part of it. Inasmuch as this body is that through which the soul is impressed, and by means of which it acts during its earthly career, it should be carefully developed and kept in as perfect a condition as possible, not only that the instrument may be more efficient, but that its reflex action upon the higher nature may be more healthful. But the soul which should ever be both the ruler and the director of this temporary mechanism, being of infinitely more importance, as it is eternal, should have the attention that its superiority to mere matter demands.

To insure the best results in proper bodily development and habits, a physical gymnasium, conducted with this aim kept steadily in view and under wise professional direction, is a necessity. On entering upon this part of a college education, three things that ought to be done by the instructor have been so well stated by Mr. Alfred M. Worcester, A. M., that I quote them. He says the student should have:

1. "A thorough physical examination of the person, in comparison with the normal type, proper allowance being made for race, age, sex, and temperament."

2. "Carefully prescribed exercise to correct deformities and deficiencies and to induce symmetrical development."

3. "Special directions as to the proper times for exercise and for the care of the body after exercise."

The regular drill and instruction given in such a gymnasium ought to lead to proper habits of exercise, recreation, bathing, diet and dress, and should also encourage many and womanly self reliance and self control. Three of the most interesting features that I have yet observed in the regu-

lar conscientious practice in such a gymnasium, are (1) increased healthfulness, (2) more self possession and courage and consequently, (3) better scholarship. A very interesting feature observed in the progress of such work, and certainly deserving a passing notice, is the splendid illustration it furnishes of the power of mind over matter. Permit me in closing this part of the discussion, to enter an earnest protest against the pernicious and too prevalent idea that a college gymnasium is established principally for the purpose of training students to take part in athletic contests. Such an idea when carried out debars the very students from the work who need it most and tends to produce an unsymmetrical, physical development, at least, of those who take part in these contests.

HABITS OF SOUL.

But, if right habits of body are valuable, much more so are such habits of soul; for herein lies the very citadel of the potency of a noble life. The regal power of the soul may be manifested not only through so-called physical acts, but it is demonstrated in a far higher and grander degree in the domain of its intellectual and spiritual operations. If on entering the gymnasium, a thorough examination is required, with a view to ascertaining the physical defects and deformities of the student; if judicious exercises are prescribed to correct these deformities and deficiencies and to induce a proper physical development; if special directions are given for the care of this temporary home of the soul, should not the soul itself be subjected to an even more thorough examination and, in view of its mighty possibilities and its infinite capacities, should not it be trained and developed by a still more rigid and careful exercise? Should not the one who undertakes this be a student of the soul and its operations? Some of the intellectual habits of the soul that a college education should carefully develop are: (1) those of study and research, (2) of logical, accurate thought, (3) of properly expressing thought, both vocally and in writing, (4) of public speaking and (5) of mental recreation (not of mental dissipation). While some of the spiritual habits of the soul whose development should be sought in such an education are: (1) those of loyalty to God and humanity, (2) of reverence and sincere worship, (3) of introspection and self control, (4) of thoughtfulness for the rights and feelings of others, (5) of ready obedience to rightful authority, (6) of systematic benevolence, (7) of fidelity to truth and promptness in the performance of duty, and (8) of perseverance and cheerfulness, united to a constant striving to be "thoroughly equipped for every good word and work." Such habits wisely exercised tend to produce and maintain both physical and psychical healthfulness, they result in a trinity of power for good whose fruits are genuine character and a noble, helpful manhood and womanhood; wide in its intellectual activities and usefulness, deep in its sympathies and loyal in its purposes.

PRACTICAL SUGGESTIONS.

To add much of practical value and interest to this discussion, I asked twenty-three different persons to give me, in writing, their answers to the question: "What is the object of a college education?" I herewith submit their answers in the order of the numbers attached: The first received the

rudiments of his education in the common schools over a half a century ago, the rest of his training came from the great university of the world's experience. After teaching many terms of district school and serving his State with fidelity, ability and honor two terms as a representative and one term as a senator in its legislature; after a long, honorable, useful life, yet, still active, intelligent and interested in all that pertains to the highest welfare of the State and of his fellow men, his words are worth recording and heeding. The next six answers are from undergraduates in the junior and senior classes in college; two of the six being ladies. These men and women are looking forward to a college education. The next five, one of whom is a lady, are graduates of various colleges, some of whom have taken post graduate work both in our own country and in Europe, and all of whom are actively engaged in teaching in college. The next ten, two of whom are ladies, are found in the various professions of law, medicine, business, teaching, and the ministry, and all are graduates of college from five to seventeen years standing; some of these, too, have taken post graduate courses of study in this country, while one took such a course both at Harvard and in Berlin. All have proved their ability and each has been unusually successful in his chosen calling. They look backward upon a college education. The last is from a thoughtful, conscientious college president.

Standing as we do in the midst of college work, taking the answers of all, including those who look forward and those who look backward, I hope we may draw therefrom some very valuable lessons. With reference to the best methods of securing such habits of soul as I have mentioned, I am glad to believe that this part of the discussion has been entrusted to others on the programme, of wider experience and of broader and deeper culture.

***No. 1—A. H. FARMER :**

There are a great many reasons why men and women should strive for a good education, some of which are selfish and some are philanthropic. Knowledge is power, and when properly applied becomes the source of great good. The world is full of truth and well disciplined minds are needed to develop it. All great achievements are the outcome of diligent inquiry and research. The teacher's vocation is a commendable one. To be able to give instruction to the learner is a benefit and satisfaction. It is a grand thought, the making really better the condition of things in the world. The uplifting of humanity is noble in itself.

No. 2—J. H. A., JUNIOR :

There are, it seems to me, two essential things which should be sought for through a collegiate course; the acquirement of a fund of general knowledge to serve as a foundation upon which to build in after years, and such a discipline of the mental faculties as will enable a man to obtain knowledge which he needs and use it to the best advantage.

No. 3—S. H. S., SENIOR :

The object of a college education is not only to give to the student a certain amount of useful knowledge, but to create or augment in him a taste for intellectual pursuits and give to the mind a systematic discipline which will serve in active life.

*One answered the question, what are the benefits of education in general, and twelve, of a college education.

No. 4—D. S., SENIOR :

In my estimation the advantages to be derived from a college course are two-fold. First as regards the individual himself, his views are broadened and the capabilities of his own life are opened up before him; then also the college course furnishes the discipline of mind which in this age of the world, one must have who expects to succeed.

No. 5—A. W. A., SENIOR :

The great and increasing tendency toward extreme specialization in every department of life renders some means of preventing intellectual narrowness almost indispensable. The long and severe course of special training required as the first condition of success in any profession inevitably tends to narrow the mental vision and prevent a just estimate of the true worth of kindred fields of activity. This tendency can best be checked by the broad and comprehensive views of life and its varied opportunities and responsibilities which a good college education provides. The symmetrical development of mind and character requires a broader and more varied discipline than training in some special line can bestow, and this it is the aim of a college course to give. To discipline and broaden the mind, should therefore be the object of a college education.

No. 6—E. P. L., JUNIOR :

The true object of a college course—the higher development of the powers, mental, moral, physical, social, as a preparation for a better, happier, more useful life.

No. 7—O. W. P., JUNIOR :

The aim of education is generally conceded to be two fold: 1st, to impart information; 2d, to discipline the mind. The etymology of the word (from *e* and *duco*, a drawing out) seems to suggest that the latter feature is the more important, and to me it seems that the literal meaning of the word is the valid one. The end of a college course of study should be subjective rather than objective, it should fit the mind for the highest possible mental activity, not make it simply a storehouse for facts, no matter how valuable or well classified they may be "*in ipso*." For no mind can utilize knowledge, clear and wide reaching though it may be, unless it has been trained to subjective and independent action. A man may purchase the finest pianoforte ever manufactured and stock his library with the best works of all great composers, but if he have not a command of the keyboard, if he cannot understand and interpret the mighty, noble thoughts of those composers, what good can he do himself or his race? The comparison may seem, at first thought, a little extreme, but I believe a careful deliberation will prove its justice. Again, the universal spirit of the age is progress, and advancement and psychic growth is the only true life. It is the Newtons, the Emersons, the Longfellow, who enrich the world's store of knowledge, philosophy, and poetry. In short it is only when a man contributes towards the universal sum of knowledge, utility, or beauty, that he is carrying out the full God-intended purpose of his existence.

And once more: Human knowledge in all its branches is now so extensive that no one man, even if it were desirable, could master its whole. Hence a college course should aim to endow the mind only with that general and elementary knowledge necessary to a broad culture and wide usefulness, and for the rest to furnish that training of the intellectual powers which will enable the minds to utilize that knowledge to the best purpose. Then let the University step in and supply that higher course of instruction which one man is generally capable of assimilating and applying to independent progress in only one direction. Then his college training and the high

habit of mental activity there acquired should enable him to utilize his more advanced knowledge in any one direction, in original inquiry or research in his chosen line. Every new discovery, every great truth wrested by science and art from the grasp of the unknown, "moves this dark world one step nearer the sun." Progress is attainable only through original and independent research. Hypotheses must be formed, conclusions drawn and adopted or discarded according as experiment and comparison with nature and intuitive perceptions prove them true or false. The aim of man's existence is that he should contribute his mite toward the advancement of his fellows and the enlightenment of his posterity, and a man can never accomplish this end by simply acquiring knowledge already demonstrated. The mind of man, that supreme gift which distinguishes him as highest in the scale of animate beings, was given him for active use in the direction of the above-mentioned ends. Hence the mind should be trained to act originally and independently, not allowed to become a cyclopedia of already observed truths. Hence it is that the bookworm never adds anything to the world's store of noble thoughts, the miser never adds to the world's wealth, the recluse never aids towards the world's redemption. And thus, by aiding toward universal progress or by the noble avocation of teaching in which he helps the higher training of other minds, he may joyfully realize that his work is well done, his part well filled, the aim of his existence most nearly realized.

No. 8—J. S. C., Prof. of Systematic Theology:

The object of all education should be to fit men to co-operate with God in producing as much holiness and happiness as possible in the world.

No. 9—F. S., Prof. of Biology:

To so enlarge the mind so that it will come into contact with a greater environment of other mind, human and divine.

No. 10—A. T. S., Prof. of Sacred Literature:

The work of a college education in the order of importance is: First, the development of soul power (comprehending moral and intellectual development); second, the impartation of knowledge; third, physical training and the right use of knowledge. As soul power is the chief aim of a college education, college studies are to be chosen which will leave the mind disciplined rather than informed. The acquisition of the special knowledge demanded for a special profession generally follows the college course.

*No. 12—H. A. D., Prof. of Normal Methods:

The college student in his classes comes in contact with the thinking men of this day, his teachers, who have a broad grasp of thought, who are accustomed to deal with large problems, and who inspire by their own personality, and by their own attainments, those who would not be thus aroused by mere book-knowledge. The atmosphere of a college or university is one of breadth of culture not found elsewhere, for to it all the professions contribute: music, art, social life; and physical culture. Young blood and enthusiasm go hand in hand. Where strong young minds are associated together in the search for truth, a mental stimulus is found that can not be gained from books. The college men of to-day are the strong men, the thinking men of to-morrow. One's associates for life are often determined during the college life, and it is not a small privilege to choose from the highest plane of thought and culture. The young man or woman of ordinary ability gains during college a self-confidence, and a self-reliance in thought,

*One answered the question, what are the benefits of education in general, and twelve, of a college education.

which he or she would not gain elsewhere. These are important factors in a life of usefulness.

No. 13—S. W. N., Prof. of Belles Lettres :

1. A body, untrained, is imperfect in development, ungraceful in carriage, often giving offense in intercourse.

2. A mind, untrained, lacks clearness, conciseness and definiteness in the use of the intellectual powers, properly harmonized emotional conditions, and the power of wise choice in the exercise of the will.

3. It would not be proper to make a broad statement concerning the moral nature, but it will be suggested below that the higher education may, and should be so directed as to quicken the conscience and broaden human sympathies.

An uneducated person usually lacks symmetry, and too often a wide charity must be exercised to excuse defects in personal habits and mental development. Even those moderately educated must suffer. The objects of the higher education then are: to correct, strengthen, and perfect the physical, mental, and moral nature; to secure manly beauty and grace; to train the hand; to quicken the preceptions; to supply the memory with carefully assorted and classified facts—(a) for use in the practical duties of life, (b) primarily, as a basis for a well-regulated and accurate exercise of the imaginative and reasoning faculties, thus enlarging the intellectual capacity to a comprehension of truth in its entirety; to govern the inter-relations of the emotions and the will, keeping them in equipoise to secure, by properly training the hand and the mind, without respect to dogmatic teaching, the recognition of the absolute equality of all men and of all grades of labor, physical and mental, and of a Supreme Being in which all truth centers.

No. 14—L. A. C., Clergyman, D. D.:

The object of a college education, to my mind, is to teach the person how to think, to open up fields for thought and investigation, to discipline mental, moral and physical powers, and, incidentally, to furnish information.

No. 15—W. W. H., Lawyer :

As to the question put by you, "what is the object of a college education?" it seems to me it is embodied in the single word "discipline," facility and accuracy of conception and action of the mind. What is learned, so far as the acquisition of facts goes, aside from a few things like the multiplication table (!), it seems to me, are as nothing as against the acquisition of methods of thought; the acquisition of accuracy of conception, concentration of thought and facility in the operations of the mind. I would have a lesson got in the shortest possible time. I believe many a good mind is ruined in the process of education by sleeping over books at night (or in the daytime, either, for that matter). I would not have more work in hand than a student can do and keep his mind cheerful and healthful.

No. 16—J. N. M., Medical Prof., Michigan University:

I think the object of a college course is to discipline the mind so it will be better able to grasp, digest and assimilate the problems of life; to judge all things from a broader standpoint and with greater justice. It is not intended that one will store up a large amount of knowledge to be utilized in the future, but to prepare him to be better able to make use of what comes to him and around him. While in college I took great pride in my mathematical work, both pure and applied, and, while I have not used the specific knowledge directly, I feel sure that much of the little success gained in my work is due

to the application of those principles of reasoning derived from the study of these branches; I have never since been satisfied without the answer to the "Why."

Again, a college course brings one into contact with many minds of different calibre, with different temperaments and different methods, and one has ample opportunity to select the best qualities and to reject the objectionable; he can learn himself, and knowing that, modify his unfavorable characteristics and thus strengthen himself where weak. Having this widened horizon he is better able to judge between right and wrong.

No. 17—L. A. S., Prof. English Literature, in Berea College:

I consider it to be the object of a college education: First, to develop, train for use, and strengthen the mental faculties; second, to furnish a knowledge of the chief departments of human learning, which shall be sufficiently comprehensive (a) to furnish sufficient data for an intelligent choice of some special line of work if desired; (b) to furnish a basis for future reading; (c) to increase the chances for a successful, useful and happy life.

No. 18—J. W. M., Sec'y and Treas. Minn. Title Ins. & Trust Co.:

I think a college education should aim to develop the following, their relative importance being in the order named:

1. Physical health.
2. Moral sense and practice.
3. Religious faith and practice.
4. Right estimates of one's relations to his neighbor and to society in general.
5. Intellectual acumen and power.
6. Fitness for practical affairs of life.

One may say that "4" is a subdivision of "2." The rude jostling, grasping avarice, and the over-reaching of the weak and unfortunate by the strong and fortunate, which I see every day in business, convinces me that morality in business is generally interpreted to mean the taking no more than the civil law would allow. Let not "6" above descend to such a level.

No. 19—H. G. K., Teacher in High School:

A broader culture physically, intellectually, morally, spiritually, to the end that we may by thought, word, and deed raise those with whom we may come in contact to a higher plane of thought, and consequently of action. To measure ourselves with others is to us of great value, it seems to me. In college we meet, presumably, the best of the young people of their respective communities. We must, after contact with them in work, have a more just estimate of ourselves. We may gain from those of superior attainments hints of great value. An outlook into the realm of literature, history and science, a knowledge of some of the things which have been thought and done by the master spirits of all ages must be of great value in the aid which it gives to right thought and action by ourselves. No one, I should think, can carefully study the elements of science without being led to reverence the first great cause and that, too, without direct instruction to that end. The same is true of history. I should say that this indirect instruction in spiritual feeling is much more effective in many cases than any amount of direct ethical training. A knowing how to get the information we wish is, perhaps, as valuable to some of us as any part of our education; how to use our minds in obtaining knowledge or in doing any particular work, mental or manual, and also where to get the help needed, I should include under "how to get information."

Inspiration for work is necessary and much of this is obtained by association with fellow students and teachers—much the larger part from teachers in many cases. I always think of the man who said, "It does not matter what my child studies but it is of the greatest importance who is his teacher." I place inspiration as one of the chief elements of successful work. This power, college instructors have pre-eminently, since each one has his line of work for which he has most ability and love; hence he can give to his pupils the same feeling. Among my greatest blessings, I count the desire given me by some of my instructors to make of myself the most I can. I have not said anything directly upon the social education, but it must be that the majority of students meet a class of people in college towns superior to many they meet at home. This is especially true where students become personally acquainted with their teachers.

No. 20—D. J. H. W., Supt. Workingman's school, N. Y. City:

The answer to the question "What is the object of a college education?" depends entirely upon the attitude of the individual. Some go because they are sent, some for honor, some for social standing, some to be better able to earn money, some to make a proper or required preparation for a profession, some for general culture, some for truth, some for preparation to do good by teaching, etc. Most of these motives have some sort of justification. Evidently some are much higher than others from an ethical standpoint. I do not set up my answer for others. Indeed, it has been different at different periods of my mental development.

My first motive was for higher social position as teacher, coupled with the belief that in such position there would be greater satisfaction in labor. Later on came motives of striving for culture, truth and usefulness. It strikes me now that the general culture, development and fitness for a part in life which comes from an introduction (through college instrumentality) to the various fields of truth should be instilled, as far as possible, into each aspiring mind. The infusing of the deepest sense of responsibility in the student should be the constant aim of the teacher; the ennobling of his motives and the most thorough equipment for his actions should be the greatest passion of the student.

No. 21—C. H. G., Marengo, Iowa, Supt. city schools:

The object of a college education is (1) discipline. The course of study pursued, the instruction received from faculty, the necessary effort of student, the associations of college life, give to the faculties a discipline that constitutes the foundation of true growth.

(2) Information. While all disciplinary studies and exercises have a value as discipline, they each have relative value for the information that may be acquired. Knowledge, *per se*, is of great value, yet secondary to discipline—the right use of power.

(3) A basis of special training for life's particular work. Discipline and information united form the broad basis upon which may safely rest the special training which makes a person a master in his chosen calling. The college education disciplines and informs, and this discipline and information is then crowned with a new, second and higher growth—knowledge and skill for specific work. The supreme object of a college education is to put the individual into possession and mastery of all the powers of his being. He has not only faculty, but power; not only knowledge, but skill; not only strength, but culture. His education prepares the person to live up near to the possibilities of his nature. The higher and better and nobler and truer he lives, the

higher and better and nobler and truer he can live. Such an education fits one to meet the end for which he was born—a complete life.

No. 22—E. A. M., Pres. Minnesota Loan & Trust Co.:

In reply to your request to me for my views as to the object of a college education, I would say, that the most important object seems to me to be that "training which develops character." In making this statement, I would not wish to be understood as underestimating the value of the information acquired, as much of it may be useful, and without it one might be somewhat ill-informed, which would greatly hinder; but the mere accumulation of facts is to be avoided, since it leads to pedantry, which is always weak.

Nor would I underestimate the value of association with eminent instructors, whose lives are, in many cases, quite an inspiration. Nor would I underestimate many other important items in a college course, but I regard them all as incidents tending to the final result, viz: an intelligent, honest, useful character.

A college education should train one to apply himself, i. e. his mind to mental work, as an apprenticeship, faithfully served, should train the eye and hand to accomplish mechanical work, with skill, good judgment, and as a result effectively, so that "every blow tells."

A college course should also teach persistency. So many fall by the way before such a course is completed that one who does persist unto the end shows that he has more than ordinary stuff in his composition. A college course should also develop a modest character. The boy who has easily stood at the head in a small school not unfrequently finds that when he comes to measure himself with stronger and brighter men, he is rather less strong and bright than he had supposed, and finally, as he finds himself at the end of his course and realizes how much there still is that he doesn't know, and how broad is the field for original research, and how limited his powers, he should feel modest indeed. It should also develop a courageous character, if by thorough mastery at each step of his work he has been enabled to go from strength to strength, and finally to do a work the size of which, if he had realized it at the outset, would have utterly discouraged him. Such a course ought also to develop the power of solitary thought, i. e. thought without the aid of books or associates, viz: such thought as comes to one when he is alone, and therefore originates with him. This thought is much more original, more concentrated and more effective than any other, and without it mental food can no more be digested and assimilated so as to strengthen and develop the mind, than physical food can without the acids of the stomach, and other aids to digestion, be assimilated, so as to strengthen and develop the body.

I venture the opinion that no person ever rose to eminence who had not first learned to absorb himself in solitary, original, independent thought. It (the college course) should develop christian character. An intelligent knowledge of the immutability of natural laws, and the sure connection between cause and effect in everything, must teach that sooner or later a just result will follow any wrong doing and that right doing is therefore the part of wisdom.

Again, the study of the sciences must teach the wisdom and kindly provisions of the infinite for all creation, and thus inspire respect as well as gratitude for the wise and tender thoughtfulness of the Creator and that the most christian character is that which combines the greatest wisdom with the greatest kindness. Perhaps the most important thing a college education should teach, is the study of one's self. Before such a course is completed it should have been borne home to the student that he is

liable to wrong doing, and that only by studying himself and ascertaining what are his tendencies to wrong doing, can he guard against and check them. He should also realize that he is weak at best, and that it is only by studying his natural tastes, and his strength, and at the same time the limit of his powers, together with the most economical, as well as skillful and effective use of them, that he can hope to accomplish the best work of which he is capable.

From the foregoing rather hastily written suggestions, you will see that "applied energy," is what I think a life should consist of, but energy so applied as to make it the most effective. It seems to me that very little respect is due to the life which merely accumulates information, and then either parades it or is too lazy or unskillful to use it effectively toward the accomplishment of some useful work, and so fails to continue to grow and develop itself, and also fails to be of any substantial benefit or service to others. I conclude then that "an effective equipment for a practical, useful, honorable life," should be the object of a college education.

No. 23—G. F. M., College Pres.:

The object of a college education should be to acquire knowledge and discipline, the former as material for use, and the latter as a means not only of acquiring other knowledge, but also of making better use of that already acquired. In the pursuit of this object, while it is the business of the college to provide chiefly for the intellectual life, the student should find himself subject to wisely drawn rules for physical training and always in the midst of a positive moral atmosphere.

The course of study should facilitate the realization of this object. Since individual students can hardly pursue with equal interest or profit all lines of study, a certain liberty of selection should be allowed under competent guidance; and since any single college can hardly encourage with equal freedom all branches of learning, prominence may well be given to certain departments of thought, provided the selection be made by enlightened persons and always with reference to the requirements and deficiencies of a given constituency in a given period.

On the part of the college, its object should be to prepare for the service of society men and women who shall be wise, thoughtful, moral and progressive guides in whatever sphere they may act.

SCOPE OF COLLEGE EDUCATION.

PRESIDENT CHARLES SCOTT, HOPE COLLEGE.

The "education" to be discussed relates only to American colleges proper. Instead of duly classifying the 400 institutions which are reported to the Bureau of Education at Washington, as being of "superior grade," I may state at once that my remarks must be applied mainly to such as Amherst or Williams, in Massachusetts, or as Lafayette and Princeton, in the Middle States; these are well known, and are fair examples of the distinctive college character. What is the kind and degree of mind-culture to be expected from such corporations? What place shall they take in the march of human civilization, and what office shall they fill in the true development of our race?

This paper cannot concern itself with high schools, though they be "preparatory" to the college, nor with the "post graduate" and "professional" courses of our universities. Neither may it indulge in idealisms of what *ought* to be, as in some Eutopia; but only in deductions of what may logically be expected from our veritable academic halls. Taking colleges then, as they are, at least in their normal purpose, let me map out, in some consistent manner, that form of liberal learning which should be their sign or symbol to the world around them.

The American college, like the nation itself, has been a rapid evolution. In the Yale or Harvard of to-day one can not recognize the staid Puritan alma maters of the colonial period. To come nearer home, the Albion or the Olivet of to-day barely suggest their troublous infancy, or the giant manhood which they are almost sure to attain. Yea, the University of Michigan is but a sort of educational Proteus. Who can tell what all this may mean in the future?

The idea of a college, with us, seems to have sprung from similar foundations in England, as for example, at Oxford. When the American colonies gained strength; when ministers of the gospel and other classes of educated men became a necessity to them, and when the people saw that they could not and should not depend upon European faculties for a knowledge of the liberal arts, then began the foundation of such superior schools as they might hope to maintain. Starting with Harvard, in 1638, nine colleges, so called, secured charters before the revolution. Be it noted that their corporate powers were quite distinct from those enjoyed at Oxford, and that their scholastic degrees were hardly indicative of corresponding scholastic merit. Since the revolution they have become a legion, but with marked changes in type

of organization and literary character; but ever having in view some ideal of advanced education.

It may be well, very briefly, to designate the stages through which these colleges have passed before attaining their present status:

1. Before the Revolution they were simply grammar schools or academies. This is proved by the corporal punishment incidents at Harvard; by the absence of Greek at times in Nassau Hall; by the presence of tutors only in others of them. Indeed, the "log college" of the elder Tennent was just as complete as was Princeton during its first decade. Nothing but private preparations preceded the A B course, and then the graduates passed on as best they could into the three learned professions.

2. After the revolution, academies of merit began to multiply all over the Atlantic States, and to train young men for a better college course.. Thereupon the higher institutions increased their professorships, and improved their curricula, and elevated their degrees and scholarships. Still, this was only an advance along the old lines of culture. The period may be said to have ended about 1820, and was further characterized by the advent of a few professional schools; but these, save in theology, became a sort of blot upon the cause of liberal education—a blot never yet removed.

3. During the next forty years some of the older colleges and a goodly number of the newer ones, not only added to their range of scholastic work, but also assumed the ambitious name of "university." Yet the elements of the European universities, the faculties of "the arts," wisely introduced science, and the modern languages into the A B course, as well as the old classical curriculum; while the corporations opened departments of theology, medicine, and law, but with doors wide open to the ignoramus in books as well as to the scholarly alumnus. This widening of "scope" in study was wide, indeed, but the other step was only the foolishness of the virgins who took lamps in their hands but took no oil with which to fill them.

4. The last stage of about 30 years has been marked by sundry peculiar features. Women have gained a place beside the men in the most advanced scholarship; the high schools of the State, supplanting the old classical academies as in France, have adopted more material and practical channels of study; normal, agricultural, scientific, polytechnic, and business schools or colleges have sprung up apace and offered tempting paths athwart the old royal highways of learning; and the colleges—universities—especially here in the west, have furnished specialties and electives, *ad libitum*, in order to bedeck the lovers or victims of a hunch-back education. Are not such institutions, mosaic as they may be, like "John O'Groat's house," full of entrances for many sons, but having only one banquet hall for a discordant and incongruous brotherhood? It may be surmised that Yale must soon introduce her special course in the science and art of ball-kicking, as popular and as honored as the highest in classic or philosophic worth.

Far be it from me to say that the standard of education has been specially harmed. Nay, it has reached a higher platform, but I do say, that a fierce battle is being fought in these United States, as to the learning and culture which leads to the best results, and produces an intellectual mind, disciplined people. So, today, it becomes the very *office of the college* to uphold and maintain the sphere of the liberal arts and sciences to unfurl the banners of educational truth until they float in folds of triumph. The scope of the college curriculum is thus made manifest. Let the learned profes-

sions be multiplied, or the uses of veritable learning be increased as they may, just in that proportion must the professorial chairs be endowed to meet the demand. Once the A. B. was sufficient, and led to all other coveted degrees, but now the S. B. is just as needful for the economic progress of our age. This concession, however, yields nothing to that one sidedness of education which has been censured. The college may increase its work, its courses and branches of study, but it never can sanction a kind of training which belies an organic standard of true and superior culture.

My thoughts may be more fully expressed in a few propositions. The college then is to have two coördinate departments, and, as I think, only two; first, that of "the Liberal Arts," and second, that of "the Sciences." The first would embrace history and the ancient classics, literature and rhetoric, mathematics and logic, physics and philosophy; the second in like manner would embrace history and the modern languages, mathematics with due applications to surveying, engineering, astronomy, etc., biology and chemistry, geology and paleontology. In both departments the object can only be the acquisition of needed knowledge, as knowledge of principles, relations and laws, rather than of practical uses. The latter belongs to the post graduate or University faculties. The college degree marks the amount of actual thought training; that discipline of mind and soul which the student needs in the conduct of a well educated life.

Under this theory, the A. B. would mean:

1. Latin, until it can be read at sight, and written with some ease and accuracy—this should be at the end of the sophomore, or in the junior year;
2. Greek, until its prose, at least, should not confuse, nor Plato be a task; until the new testament, in Greek, could be a pleasant companion;
3. Mathematics in order, to the calculus and mechanics;
4. History, English literature, logic, and rhetoric, with oratory, to a scholarly degree of attainment;
5. The philosophies, mental, moral, natural, political, and social, with connections;
6. At least two selections throughout from the scientific course, for example, German, chemistry, biology, or geology.

In like manner, the S. B. would mean:

1. French (or Italian) and German, until they can be read and written with ease; with modern history in connection;
2. Chemistry, and with it laboratory practice, analysis, and chemical manufacture;
3. Mathematics, pure, and as applied to related sciences; and physics.
4. Biology, beginning with zoology, physiology and botany; and using the microscope, and here, in connection with physiology, is the needed training of a hygienic gymnasium.
5. Geology, in its scientific and practical relations, e. g., with metalurgy.
6. At least, two selections from the course of the liberal arts, as for example, Latin, English literature or philosophy. As in the other case, the selections may be in lieu of or in addition to the regular studies of the course, as may be deemed expedient.

A remark or two is yet called for in order to prevent misapprehension:

1. If the foundation be laid as above; if the knowledge of ancient or modern languages be of a standard degree, and mathematics be carried on through plane geometry and trigonometry, I see no reason why a *literary*

elective course may not follow and receive the same degrees, of A. B. and S. B. It is objectionable, however, to give any degree like L. B. for an inferior or easier amount of scholastic work.

2. Those who wish some studies, in part, in a college are not to be refused, are to be welcomed, so far as they can enter any of the classes without detriment to the institution; but not to be considered as candidates for a degree.

There can be no difference in the nature or object of a liberal education, on the above principle of co-ordinate discipline culture; and, as in Germany, such an education would prepare for all the advantages and degrees of a proper university. Thus the college would truly fulfill the object of its being.

The college is an "old bottle." If I be considered as putting no new wine therein, I but follow the advice of the Lord himself. Instead of "breaking the bottle," it is certainly wiser to put the old wine therein, made good and mellow for the greater advancement and welfare of the American people.

THE LIMIT OF COLLEGE STUDIES.

PROFESSOR ALEXANDER HADLOCK, KALAMAZOO COLLEGE.

The college must adapt its work to the end in view. That the design of the college should be invariably the same seems sufficiently apparent. Therefore, there should be a uniformity of studies in the different colleges consistent with a common purpose; and, in seeking the limit of these studies, this common aim will be the first object of inquiry. What, then, is the function of the college? What is it designed to accomplish?

Up to a recent date the college has been the school of highest rank in our educational system. But this system is incomplete; it still lacks, with one or two exceptions, what must ultimately be its crowning excellence.

The tendency in education is more and more towards specialism. The entire sum of knowledge is so great, the field explored so broad, and the various lines of study so numerous and extended, that only the specialist can increase the acquisitions already made. The most liberal education cannot compass the whole of what modern research has revealed. By reason of a limited mental capacity and the boundless extent of truth, the people who shall constantly push their investigations further and further into the various departments of knowledge will, of necessity, produce their specialists, and the highest system of education will amply provide for advanced study along special lines. By the opportunities thus afforded the devotees of learning will enrich the general repository of knowledge with products from their chosen fields. Therefore, we may conclude that in the most advanced civilization education will be both general and special.

But observe the distinction between the specialism thus deduced and a premature specialism both prevalent and deplorable. The one is the supplement of a broad and liberal culture, the other is its ridiculous substitute; the one elevates into power and dignity, the other ends in weakness and unworthiness; the one is the consummation of a natural development, the other is consummate nonsense. The higher presupposes an attainment which the lower does not even attempt; the higher is the most exalted feature in a system of education constructed on rational principles, the lower is no part of that system, and can be justified only in special cases on the ground of adverse circumstances and the unimportance of the results to be attained. A danger to education and society lies in the false assumption that the emoluments of the higher can be secured through the spurious methods of the lower.

This advanced special study may be undertaken from a love of learning, for its own sake, or as preparation for positions requiring special fitness. But, whatever the object, the interdependence of all truth and the superior mental training pre-requisite to the best intellectual endeavors demand that the general education, which culminates in the special, be broad, extended, and thorough.

To furnish this general or liberal education is the office of the college. To take up the work which the college has prosecuted as a unit, and, with increased facilities, carry it forward in separate departments, each provided with a special faculty of the ablest scholars, is the function of the university. But, in this country, from the indiscriminate use of the name "university" for college, it would be difficult to discover the real difference between the two institutions. One would be apt to call the university a "big college." Yet they are as distinct in rank, aim, and methods as the preparatory school and the college. These higher schools, yet to be endowed and equipped, which will matriculate no under-graduates, will be the universities in the true and historic sense of the term. Allow me to quote from two distinguished educators.

The first, in considering various propositions as opposed to the prescribed curriculum, says: "It is contended by the advocates of these several propositions that in these ways we can exalt the college into a university and invest it with the dignity, the privileges, and, above all, with the freedom, which are supposed to belong to an institution with the more high sounding name. All of these projects do indeed propose to attach to the college some of the features which properly belong to the university, viz.: freedom of election, the gratification of special preferences and tastes, real or supposed, and a direct preparation for the student's contemplated profession or business in life. But they all fail to provide or require the feature which gives the university its dignity and invests its name with special honor, and that is a *thorough discipline previously undergone and a liberal culture already attained*. These are indispensable before the student is fit to exercise the freedom, to use the selection, or appreciate the instructions which belong to the university. A university consisting of uncultured and undisciplined youths, whose conceit may be supposed to be in direct proportion to their ignorance, and whose self-confidence springs out of their lack of knowledge, is the less to be desired for the highest ends of a university exactly in proportion to the amplitude of its endowments, the brilliancy and learning of its professors, and the sanguine hopefulness of its numerous friends. Its theory is false and its fruits must be disappointing. It can only become what it calls itself when it shall have developed within itself a college or school of liberal arts which shall train fit pupils for its university classes, and when it shall have employed in its several schools the curricula and methods which are suitable to each."

The second passage which I wish to quote is from an inaugural address delivered during the present year. In enumerating the ways in which some of our institutions of higher learning have sanctioned what he calls a crude specialism, the writer goes on to say: "This has been done conspicuously in four ways: first, by throwing open the professional and special courses to men of defective general culture, with no preparation for university work, such as is insisted upon in Germany, where every candidate for university standing is required to be an 'abiturient' from a gymnasium or real gym-

nasium; second, by the introduction into some of our colleges of university studies and methods without a corresponding elevation of the standard of admission, in the hope that the name 'university' might thus be justified; third, by conveying to students the impression that 'liberal' culture is no real or definable thing, but that any scheme of study, arranged and followed at the learner's option is as good as another, if only the four years are spent at the college and the term bills are promptly paid; and, fourth, by the shameful competition among rival colleges in diluting the courses of study to suit the callow intellectual estimates and even the cerebral weakness of under-graduates, really forming the curriculum on the principle of the market rather than on the principle of scholarship, literally and openly rivaling one another in offering 'attractions' hardly more dignified than the 'chromos' of struggling newspapers. The results of this are that, while most of our colleges wish to be thought universities, most of our universities are merely colleges; it is possible to be graduated in utter ignorance of whole sections of knowledge once considered indispensable to a liberal education; and the degree of 'Bachelor of Arts' from an American college has an ambiguity that places it in peril of contempt at home and of ridicule abroad."

In accordance with these views so forcibly expressed by eminent authorities, we do not hesitate to reaffirm that the legitimate aim of the college is to impart a liberal education; and, hence, the studies comprised in the curriculum must be conducive to this end.

What then ought a liberal course of study to include? This is the hackneyed theme which has separated the "humanists" on the one hand from the "realists" on the other. But during the controversy, the conservatives of the two sides have met on middle ground, and recognized both the classics and the sciences as indispensable to a liberal course of study.

A liberally educated man is distinguished by the possession of two things, viz: a well disciplined mind and a considerable fund of knowledge. The first may be termed his mental equipment. It is that full development of the understanding which broadens the range and commands the choice of his activities. It is a part of the necessary outfit of the scholar, the professional man, the civil functionary, and of every one called to fill a high and responsible position in life.

Undoubtedly, all earnest study has a disciplinary value; but the studies generally conceded to be pre-eminently serviceable, as affording mental gymnastics, are language and mathematics. And to be convinced of their close kinship one need only to instruct a class in common arithmetic, fixing as the standard of attainment not simply the bungling performances of processes, but the ability to express in clear, and accurate language, the logical relations of the concepts under consideration. Such an one will find that mathematical and linguistic studies, so far as they aim at clearness of conception and exact habits of thought, go hand in hand. I think we may unhesitatingly adopt the prescription proposed by another: "Administer mathematics in large doses in proportion to the learner's disposition to be vague or conceited."

Much of the criticism against the study of the ancient classical languages has had reference to manner rather than to matter. It is objected that instead of conducting such study to its legitimate end the means is made

the end; that the genius and spirit of the language and literature are sacrificed for extended philological study and grammatical analysis.

While we are not concerned in this connection with the question of methods, yet several queries naturally arise just here: Can mental discipline ever be justified as an end? A trained intellect is of untold value, and certainly, in active life, becomes a means; but, to the institution which confers it, can training be made an end, or only a means to some further end? If the former, then why may not the study of Latin and Greek be so conducted? If the latter, then why is the study of mathematics sometimes so pursued? I only suggest these queries incidentally, since, whatever the answers, the classics and mathematics, for other reasons, will form a part of the college curriculum.

And this brings us to consider the other element of a liberal education, the fund of acquired knowledge.

Admitting the claims of both "humanist" and "realist," it will include the classical languages, as containing the wealth of Greek and Roman civilization, and also those modern languages in whose forms the splendid results of the modern spirit of achievement are so largely stored up. But nothing can be accomplished in the exact sciences without a knowledge of mathematics, and therefore language and mathematics, as a means to future advancement, are the first studies to demand attention. They have been called the "scholar's instrumental equipment;" coupled with the mental power which the mastery of them gives, they open the way to all other departments of knowledge.

With this equipment in hand, a wide range of scientific study is presented. But, wide as it is, may not the whole round of the abstract and leading concrete sciences be brought within the limits of the college course? Certainly not by present methods and present appliances; not by wading through great treatises on the various subjects. But may not skilled instructors, specialists, by the aid of laboratories, apparatus, and all other needed material appointments, be able to present the leading facts and principles of science so forcibly and tangibly that the attainment of a liberal knowledge of the sciences shall be possible within the limits of an academic course? This plan would not contemplate specialized study, but such a liberal knowledge as would satisfy the following high ideal of a liberally educated man:

"In the present age, no man is liberally educated who has not acquired the ability to put himself in possession of the best results of human thought and experience, and to employ those methods by which truth is discovered and the sum of knowledge is augmented. Whether specialist or not, any man who has acquired that ability and is fitted to take his place in the social system as a participant in the world's best thought, and to profit by the attainments of his race in his own person, is a liberally educated man."

Such a liberal treatment of the sciences would also meet the view of a noted English writer on education, that the prime office of instruction is "to enable a man to *know himself and the world*;" or of an eminent English scientist expressed in the following words:

"What I mean is, that no boy nor girl should leave school without possessing a grasp of the general character of science, and without having been disciplined, more or less in the methods of all sciences; so that, when turned into the world to make their own way, they shall be prepared to face scien-

tific problems, not by knowing at once the conditions of every problem, or by being able to solve it; but by being familiar with the general current of scientific thought, and by being able to apply the methods of science in the proper way, when they have acquainted themselves with the conditions of the special problem."

But whatever, in the light of experience, the solution of the question may be, immeasurably more might be done in the direction I have indicated than has been attempted; and, even if it shall be found that the number of the more important sciences has outgrown our capacity for liberal education, still the college will do well to keep within its proper sphere and attain the highest practicable standard of *liberal* culture. It seems to me that the fully equipped college of the future, insisting on a *thorough preparation* for admission, may include in its curriculum, besides language, literature, history and mathematics, physics, chemistry, geology, astronomy, biology, physiology, psychology, logic, ethics, economics, politics, sociology, philosophy, and the history of the fine arts.

I have conditioned this on a thorough preparation, for a great bane of college work to-day is insufficient preparation; much of the energy of the college is spent in supplying this lack. What was said of the boys of the fourteenth century may be as truly said of many of our own boys and girls; that as "they were not grounded in their first rudiments at a proper time they built a tottering edifice on an insecure foundation."

METHODS OF COLLEGE WORK.

PRES. H. Q. BUTTERFIELD, OLIVET COLLEGE.

The subject assigned is, "Methods of College Work; Should we Confine Ourselves to Hearing Recitations?"

It is well to remember the limitation to which the discussion must submit. The "work" named is "College Work." The question has nothing to do with sub-freshmen or post-graduates. It asks for the best methods of teaching students who are advancing toward college degrees. But, even with this limitation, the discussion might claim twenty hours instead of twenty minutes. Only salient points can be touched.

I. First, as to mere form, the question is easily answered. *We should not confine ourselves to hearing recitations.* Scarcely a subject in the course will refuse to be touched, and, to some degree, illuminated by lectures. Some subjects invite lectures more readily than others; but none exclude them.

II. But, secondly, we must discriminate:

1. As to the student's stage of mental development. The freshman, just from high school or academy, lacks both the ability and the receptivity needed to make lectures profitable. He lacks discipline. He lacks both digital and mental nimbleness. His fingers are slow, because his mind is not quick. The senior's trained thought has made his fingers its "nimble servitors." As an instrument of teaching therefore, the lecture, feeble at first, becomes more efficient as the student advances. Apart from all other considerations, the professor must have constant regard to the student's ability to receive lectures with profit. This, then, is a factor in the argument. The ability to profit by the text-book belongs to senior as to freshman, and while the text-book must be almost the sole reliance of the freshman, it never refuses to be guide, philosopher and friend to the senior; but while the lecture may be a full moon to the senior, it can be but the thinnest crescent to the freshman.

2. A second discrimination must be made; and that as to subjects. Some subjects open their stores to the lecturer much more generously than others.

In mathematics there seems to be scant materials for the lecturer, yet lectures may come in to some extent. Dry as the subject seems, it has matter that appeals to the scientific imagination. Lectures may map out the field;

may gather the results; may do much to create interest and arouse enthusiasm. The history of the science, its discoveries, its applications, seen in mixed mathematics, these may be profitably shown in lectures.

The ancient and modern languages must closely cleave to text-books; yet, from this broad and beaten track, excursions may be made in many directions, into the origin of language, into comparative philology, into the history, growth and literature of individual languages. Even if these subjects can not be treated in text-book study, their treatment in a few lectures will show the class how broad, and rich, and varied is the field they are cultivating.

Rhetoric and logic call for the text-book rather than the lecture; yet there is in both matter for lectures.

English literature is very inviting to the lecturer; yet the text-book must be kept in hand, and daily recitations, interspersed with students' essays, must be the rule.

In mental, moral and political science it is always best to have a text-book. That book may be far inferior to the one the Professor knows he could write, but the student needs it, as the common ground on which to meet his instructor. If the Professor has written a text-book upon the subject, he will, of course, use that. If he has not, let him seek the best to be found. With the best book, he will find much informal lecturing is needed. The poorer the text-book the more lecturing, formal or informal; but even a poor text-book is better than none.

In certain of the sciences, as chemistry and natural philosophy, lectures and experiments may go hand in hand; but neither experiments nor lectures can take the place of the text-book. Let that form the centre of the advancing host, and let experiments and lectures align themselves with it.

In geology, the text-book comes to the front; but the teacher must supplement with informal or formal lecturing, illustrating, where the author could not for lack of space, and adding such new matter as discovery has given. The literature of the subject yields rich ore for lecture treatment.

In biological subjects, much must be done in the laboratory. There the student meets nature face to face. This is of supreme moment. Yet it is doubtful whether the text-books, as some say, should lie at hand simply to verify what scalpel and microscope reveal. Good judges may honestly differ here; but the probabilities, gathered from general principles, seem to point one way. Some of those examples by which philosophy teaches in history might be cited. The lecturer may make his quizzes as searching as possible, lectures without the systematic use of the text-book are likely to leave out some of those heavy strokes by which knowledge sinks the piles for her foundation. Not long ago a brilliant lecturer took his class through a term's work in biology. He was master of the subject and of the situation. He was deservedly popular with his class; but when he sought the sheaves he had been helping them to reap, he found the grain slipping from the bands with which he had thought it securely bound. He was grievously disappointed.

Without farther discrimination as to subjects, we may generalize and say, that had we to choose between hearing recitations, exclusive of all formal lectures, and giving lectures exclusive of hearing recitations, we should, without hesitation, choose the hearing of recitations. Text-books without lectures would give us thorough scholarship, though, it may be, somewhat lacking in breadth. Lectures without recitations from text-books might

give us breadth, but some of us would not be willing to vouch for the thoroughness.

Lectures address the ear and text-books the eye. The ear can not, in this case, have its lesson repeated; the eye can have it repeated at will; the only limitation lying in time. In this case also, the eye may get some aid from the ear, as the teacher illustrates and confirms the lessons by informal lecturing; and, again, as the student in mastering the text-book lesson vocalizes it and recites it to himself. In this case the lesson knocks at both eye-gate and ear-gate. Two percepts enter Mansoul, and help form the idea or product of knowledge. In other words, the process of forming knowledge is furthered by two senses instead of one.

It is a familiar law in psychology that objects are vividly remembered, other things equal, in proportion to the mental energy with which they are first apprehended.

It is claimed, and with apparent justice, that the student's mental state in hearing a lecture, and mastering a text-book lesson, are not charged with the same degree of energy; that in one case the mind, though interested and stimulated, is mainly receptive; while, in the other, it is active, aggressive, marshaling its powers to meet the demand. If this is so, and if this smaller quantum of energy is liable sometimes to be misdirected, the argument for text-book study is much strengthened. I once heard a professor complain that in college he often had to spend much time and energy in taking and straightening his notes, when the facts and principles taught could have been more easily and more efficiently gathered from the text-book.

Another familiar law in psychology is that *repetition* greatly furthers the process by which we form clear ideas. In hearing lectures, there is little chance for repetition; the student dislikes to ask for it. It seems like a confession that he is not quite so nimble as his fellows. At the best, little repetition is possible. Afterwards he finds that reading and interpreting his notes is a very different thing from studying the clear pages of his text-book. But in mastering the lesson in the text-book he has "scope and verge" for repetition. It is iteration upon iteration; "iteramque, iteramque," till the whole lesson becomes clear as a picture.

If these points are well taken, it would seem that hearing lectures does not build the materials of knowledge into so firm a structure as does the studying of text-books; doubtless because it lacks that strong cement which prolonged attention affords. To the eye two buildings may seem equally firm; but if the mortar is poor in the one and good in the other, some strain may show their difference in lasting qualities.

If these points are well taken, another inference is sure; the mental discipline gained in hearing lectures is not equal to that gained in mastering text-books. Thus the chief end of the college course is partially defeated.

If these points are well taken, it is not safe to infer the lecture method is the better because students may prefer it. If it requires less hard work, the secret of its popularity may lurk in that fact. It is safe to say that the average student is not over anxious to do more than is necessary to win his degree. If these things are so, it is not safe to infer the lecture method is the better, because many professors affect it. They may prefer it because students prefer it. Some may prefer it for the same reason that students prefer it. They may prefer it for various considerations which do not cut into the solid logic of the case.

If these things are so, it is not safe to reason from German universities to American colleges. Allowing the lecture method to be the best for the German university student, who has behind him nine years of exclusively text-book study, in the gymnasium, it does not follow that the same method, or largely the same method, is best for the American college student, who is taking substantially the gymnasium course. But this is too generous toward the German lecture method, Germans themselves being judges. While the late Pres. Felton was explaining our college system, with its daily examinations in text-book studies, to a group of German scholars, one of them fervently exclaimed: "Would to God we had it here!" To the same purport are the words of another college president: "The judgment of many of the most intelligent professors and educators of Germany itself is in favor of modifying the lecture system by introducing instruction by recitations to a large extent. The only insuperable obstacle which these opinions encounter is the indolence and indisposition of the professors themselves, who greatly prefer a system which relieves them of the drudgery and petty details which the other method seems to involve."

The conclusion is this: The nature of the subjects taught in the college course, the average immaturity of the students, and the laws governing the acquisition of knowledge very much restrict the scope of the lecture method. A few lectures for seniors, fewer for juniors and sophomores, very few for freshmen. Our principle work is to hear (in the right sense of that word) recitations.

COLLEGE CO-EDUCATION, AS SEEN IN THE LIGHT OF TWENTY YEARS EXPERIENCE.

President Angell, after expressing his regret that Professor D'Ooge was unexpectedly detained from the meeting, said that at the request of Prof. D'Ooge he and Prof. Demmon would offer a few words on the subject of co-education at the university. The following is an outline of President Angell's remarks:

On coming to the University in 1871, as he had had no connection with any college to which women were admitted, three questions suggested themselves to his mind:

1. Could women endure the physical strain of the college work assigned to men? His observation had led him to the conclusion that if women were in fair health when they entered college, and then did not undertake to do outside work while carrying on their studies, and did not devote too much of their time to social entertainments, they were in less danger of breaking down than women out of college. Many a young woman, after leaving the academy or high school, was broken down in health because her active mind had no congenial employment. If such girls went to college, and, in company with other women of similar tastes, pursued regular and congenial studies, the healthy stimulation of the life was conducive to health. He had known women who were in rather frail health on entering the university, grow steadily better through their course.

2. Could women do the work of a college course, and keep up with the men? To this question experience has given an affirmative answer. There is no branch of study in which women have not done excellent work. They have been eminent, not alone in literature and languages, but also in the severer mathematical and philosophic studies.

3. Will women, studying in a college with men, lose any of their womanly traits, any of that womanly charm, which we men all feel, but cannot analyze? I believe those who have had the amplest opportunities to judge will say that they do not.

Upon all these points, I think the representatives of all the Michigan colleges will agree.

Nor should we forget what a blessing the admission of women to our Michigan colleges has been, not only on their own account, but also on account of the high schools, seminaries, and women's colleges, into which these thoroughly trained women have carried so much higher a type of instruction than used to be given by women. The very fact that they have won their diplomas under the same tests as the men, has given them a confidence and consciousness of strength, as they have gone to their work, which added much to their power. And they have carried into all our schools the best ideals of intellectual work.

I will ask Professor Demmon to say something of the success of the women in his special department, English literature.*

*No report of Prof. Demmon's remarks have been received.

COLLEGE DISCIPLINE.

PRESIDENT GEO. F. HUNTING, ALMA COLLEGE.

My knowledge of the subject assigned me is eminently practical and pre-eminently personal, as the records of my alma mater would prove, but modesty will not permit me to draw the veil which hides those years of student life during which I was unconsciously preparing to come before you to-day with a paper on College Discipline. My very brief experience as a college officer has given me no fitness to address you, and I am conscious of presumption in even consenting to come here at all. However, as landsmen talk of the sea, so I dare to offer a suggestion or two on this theme, trusting that I may provoke discussion and so indirectly serve the purpose of this gathering.

I was once a boy and lived with a hundred other boys, of mongrel sort, in a college dormitory, and I have vivid memories of matters of observation and experience there which go far to convince me that, for the average American boy, a crowded dormitory is a school of vice. Therefore, I do not believe in dormitories for boys, and while the experience of others might modify my thoughts and feeling about this matter, I do not expect to hear any convincing argument in favor of that aggregation of fun, mischief, and malice, known as a college dormitory.

About dormitories for girls, I am not so positive. Indeed, I am disposed to think that for the average girl, under twenty years old, something akin to a christian home is the best place, and this is what a ladies' dormitory should be made. There will be mischief in every such institution, and since even a slight stain upon a girl's life is a very serious thing, I think that life should be most zealously guarded. But, let the dormitory dwellers form a family with a preceptress at the head who shall, so far as possible, be a mother to the girls. Our custom at Alma, and that is the only school I know much about, is to have a common dining room in the ladies' hall, to which the young men are invited, as boarders in the family, and after the meal is over the young men are expected to retire to their own quarters at once, except upon one or two appointed evenings when they are invited to spend an hour or two in the reception room. These hours, together with the meetings in chapel and at recitations, afford abundant opportunity for social intercourse, and the better class of students are satisfied with the arrangement. The dormitory life should be, as far as consistent with prudence, a social and by no means a solitary life. Let the inmates of the

home have the same liberty to go and come as they would have in a well-regulated christian family, and that means *proper* hours and *always with permission*.

It seems to me of very great importance that pains be taken to banish from the college that which is too common among students—a feeling of antagonism between them and their instructors. Let there be an effort made to convince the young people that the faculty is a body of earnest christian men and women who have been chosen with special reference to the needs of the students, and who have in them a warm, personal interest.

The students should be impressed with the thought that they have been committed to the *care* of these instructors by their parents and friends, and that the loved ones in the home have confidence in these instructors, and expect them to be to their children in the place of guardian or parent during the sessions of the college. This implies two things: First, that every instructor should have a sense of personal responsibility to the parent and the pupil, and that, in the carrying out of the duties of the college, they should be inspired by an earnest desire for the physical, mental, moral and spiritual well-being and right development of every student. Let the youth assembled be treated, not like a company of soldiers under the command of officers who have no interest in the men, beyond securing on their part implicit obedience to an iron rule, but rather let these young people be to us a family of children among whom we are to exercise a helpful, saving influence. Keeping the mace of authority hidden beneath the folds of a home-like tenderness and a pleasant care-taking, which convinces all of the genuine interest felt in them—everyone, and of a desire to grant every reasonable wish. Is this tender sentiment out of place in a college? I cannot think so, for my ideal, is the christian home. I would do for these young people just what I would have the faculty of a college do for my children, were they away from home at school. I would have the teachers interest themselves in every want of my children. I would have them caution my children, and counsel them as to the care of their physical health. I would have them advise and direct as to their mental culture, and above all else I would have the instructors of my children deeply, warmly, constantly interested in their spiritual well-being. This is what I would have the faculty of a college do for my girls and boys, and shall I do less for the children committed to my care? Of course there are little details which make up the care-taking and discipline of home, which cannot be carried out in a college; but I would have the home spirit, and the home methods pervade and characterize the school as a whole system of culture and development. But someone will of course suggest that we shall find a class of wayward youngsters who will not at all appreciate this kind of effort for their good, but would simply despise it, and ridicule it doubtless, and I would have just one way of dealing with that class of spoiled children who are committed to my care. I would try faithfully to induce them to conform to our rules, and secure in their minds if possible an appreciation of the fact that we are trying to advance their interests, to make men and women of them. I would give them a fair trial of a term, and then if I found them incorrigible or became satisfied that their influence over their mates was not good. I should simply request the parents to remove them from the school. Just as I would ask them to take into their own care, if possible, a child ill of some contagious disease—for the good of the child

and for the safety of others. In line with this, permit me to read from the catalogue of Alma college, what we advertise, touching this matter.

Applicants for admission to any department of the College must present satisfactory testimonials of good character, and, if from other institutions of learning, certificates of honorable dismissal.

All students will be responsible to the College authorities from the time of their registration.

The first three months of connection with the College will be considered as a season of probation, and if, during this period, a longer stay be deemed for any reason unadvisable, the student may be so informed privately, and permitted to withdraw without farther action.

Any student whose accounts with the treasurer are satisfactorily arranged, and against whom there is no charge of improper conduct, is entitled to an honorable dismissal.

Whenever the influence of a student is found to be bad, the Faculty may, if they deem it best, sever his connection with the College without making formal charges.

N. B.—Alma College is *not* a *Reform School*, nor a place for idlers. To young men who are ready to yield cheerful obedience to the rules of the College, and do honest work, all possible advantages are offered. *We have no room for any others.*

Girls who are ready to yield cheerful obedience to all the requirements of the school, and to give faithful attention to their studies, will be welcomed and aided in every way possible. *We want no others at any price.*

Pardon the seeming egotism of this introduction of matter from our catalogue. It is ours only in the sense of having been by us adopted, and you will find the *same* regulations in *some* other colleges, and the essentials of the same in *most* denominational schools with which I am acquainted. The only item peculiar to our school is the *emphatic* advertising of our wish that *none* but young people of good morals apply for admission. We expect these words will deter some young people from coming to us; but we think that we shall be the gainers on the whole. *All* who can secure a certificate of good moral character, from a reliable source, can come as probationers. None can stay except they comply with the rules of the school. Money does not pay for educating a bad boy or girl, and the probability of reform of such as come to the institution without moral stamina or character, is not strong enough to warrant us in keeping a class of young men or women whose touch is poisonous to all about them. The place to lay the foundation of moral character is not in the school, but in the home. Doubtless most present have read the editorial, copied in many papers from the New York Evening Journal, the point of which is, the earnest claim for the necessity of a moral no less than an intellectual preparation for college. I am most heartily glad that such an article, from such a source, has come before the public. There is too much neglect of discipline in the home, and the sooner all our schools refuse to receive unruly children the better for both the school and the family. I understand, of course, that many young people who had no settled religious convictions when they entered college, have been influenced to take some decided stand for the right, through the agencies brought to bear upon them during their college life; but the reform of an immoral young man or woman, in connection with college, does not occur often enough to form the ground of an argument in favor of admitting such to our schools. Very likely some modification of rules will always be necessary to meet pecu-

liar circumstances; but I think the rule adopted by Alma, in this connection, will profitably apply to the great majority of cases. It may be suggested that the methods hinted at will not meet the wants of *college* students; that they are applicable only to a preparatory class. I reply, that while there may be need of a broader interpretation of the rule, when applied to students of more mature age, the rule and method are yet essentially right in spirit.

As to rules, permit me farther to say I would have as few as possible, and then let them be like the "law of the Medes and Persians." Publish the few requirements you expect to enforce, then trust to the honor of the student to obey a reasonable rule. If he refuse to do this, then he had better be removed from the school at once, before his disposition spreads.

A word farther will perhaps be of interest to such as are not acquainted with the so-called jury system adopted by Amherst, Bowdoin and some other Eastern colleges. We have tested this system to some extent, but have not yet given it a fair trial. So far, we are in the main pleased with the results. To bring the matter before you in the readiest way, let me read a little more from this catalogue, in which we have tried to embody the best results of the experience of college men touching this matter of discipline:

FORM OF GOVERNMENT.

The students are made sharers in the government of the College, through the College Council, which consists of the President and a representative from each class and society. The president, who is the representative of the faculty, is the presiding officer.

ARTICLES OF AGREEMENT BETWEEN THE FACULTY AND STUDENTS OF ALMA COLLEGE.

The aim of these Articles of Agreement is that Education which comes from sharing in and submitting to a Representative Government.

ARTICLE I—JUSTICE—BY WHOM ADMINISTERED.

The administration of justice in this College shall be delegated to the President as representing the Faculty and to a jury representing the students.

ARTICLE II—JURY.

The jury shall consist of students in good and regular standing. They shall be chosen as follows:

Each class shall elect one member, and each College society with a membership of ten shall also be entitled to one seat on the jury.

The Faculty shall be the judges of the standing of students and societies, and there shall be no organization of students of this College, the sessions of which shall not be open at all times to every member of the Faculty.

ARTICLE III—TERM OF OFFICE.

Seats on the jury shall be vacated at the close of each College year.

ARTICLE IV—PLEDGE.

Each jurymen-elect, before taking his seat on the jury, shall assent to the following pledge, administered to him by the President in the presence of the Faculty: "You solemnly promise, on your honor, that you will faithfully perform the duties of jurymen with due diligence and without fear or favor.

ARTICLE V—RESIGNATION.

Any jurymen who wishes to resign must notify the President and give his reasons. The vacancy shall be filled by his constituents.

ARTICLE VI—RIGHT OF CHALLENGE.

It shall be competent for students, not less than six in number, to send a written communication, over their own signatures, to the Faculty, challenging the right of any special jurymen to take or hold his seat, naming any reasonable ground of objection, e. g., invalidity of election, unfitness of character, inattention or unfaithfulness to duty.

ARTICLE VII—QUORUM.

The jury may perform all duties when the number of jurymen present is four.

ARTICLE VIII—TIME AND PLACE OF MEETING.

The President and jury shall meet in regular session. The time and place must be duly advertised.

ARTICLE IX—VERDICTS.

Verdicts shall be rendered as follows :

1. Verdict of Fact. The Verdict of Fact shall state the facts of the case as ascertained by the jury. This verdict shall be agreed to *unanimously*.
2. Verdict of Opinion. The Verdict of Opinion shall state the penalty. The verdict must be agreed to by a *majority*.

Both verdicts shall be in writing and certified by the Foreman.

ARTICLE X—RIGHT OF APPEAL.

Appeals may be taken to the Faculty.

ARTICLE XI—JURY LIMITATIONS.

1. No decision of the jury shall be valid if it conflicts with laws or rules enacted by the Board of Trustees or by the Faculty.

2. The President is the executive officer, and although he may at his discretion *modify* the penalty, he shall in no case impose a penalty *heavier* than that fixed by the jury, and he shall have no vote in the matter of verdicts.

ARTICLE XII—DUTIES OF THE JURY.

It shall be the duty of the jury to administer justice. To this end they shall ascertain the facts of any case presented to them by every honorable means. The jurisdiction of the jury shall cover all matters relating to the peace, order, rights, security and good name of the College community.

ARTICLE XIII—AMENDMENTS.

The two parties to the adoption, amendment and annulment of these articles are the Faculty and the students.

1. These articles shall stand adopted if the two parties agree by a majority vote of each.

2. Amendments may be proposed by a majority vote of either party, and at the expiration of one week's notice to the other party, they shall be adopted if a majority of each party then vote for so doing.

3. Either party may decide by a three-fourths majority vote to give notice to the other party of its intention to withdraw from these Articles of Agreement, and at the

expiration of four weeks from the giving of such notice, may by another three-fourths majority vote to affirm its withdrawal. The administration of justice shall then at once revert to the Faculty.

Of this system of government, President Seelye, of Amherst, writes in pleasant terms of commendation which I would be glad to read, but the letter is not in my hands at this moment. I am glad, however, to be able to read the following from President Hyde of Bowdoin:

BOWDOIN COLLEGE, BRUNSWICK, ME., September 7, 1887.

Dear Mr. Davis:

It has given us all great satisfaction to learn of your connection with Alma College. In reply to your inquiry respecting the jury system, we are all agreed that it gives better results than any other method; and the discipline of governing themselves is also of great value to the students. Its chief value is in prevention of evil, rather than in the cure of it. The system has worked so well in this respect that only two or three times a year has there been anything for the jury to do.

Very truly yours,

WM. DEW. HYDE.

Our brief experience at Alma verifies these words of Pres. Hyde, thus far; but, as I have already said, the system is an experiment with us as yet. The matter of prevention of trouble, to which Pres. Hyde refers, lies largely in this:

The students have voluntarily chosen a monitor, who will be with them every day, and they expect him to report any and all misdemeanors, in accordance with his pledge.

And now, having convinced you that I have very little knowledge of the subject in hand, I give place to such as will discuss it more intelligently.

D O C U M E N T S

ACCOMPANYING THE

R E P O R T

OF THE

SUPERINTENDENT OF PUBLIC INSTRUCTION.

UNIVERSITY OF MICHIGAN.

THE PRESIDENT'S REPORT.

To the Honorable, the Board of Regents :

I present you herewith my Annual Report for the year ending September 30, 1889.

The following changes have been made in the Faculties:

At the meeting of the Board in October, 1888, Albert A. Stanley was elected Professor of Music; N. S. Hoff, D. D. S., who had been appointed temporarily, was appointed permanently Assistant Professor of Practical Dentistry, and J. N. Martin, M. D., was appointed Acting Professor of Obstetrics and Diseases of Women and Children in the Department of Medicine and Surgery (at first for one semester and afterwards, in December, for the whole year).

In December, A. B. Stevens, Ph. C., received the permanent appointment of Instructor in Pharmacy.

In April, 1889, John Dewey, Ph. D., was elected Professor of Philosophy, in place of Professor George S. Morris, deceased.

In June, Francis L. Kelsey, Ph. D., was appointed Professor of the Latin Language and Literature; J. E. Reighard, Ph. B., Assistant Professor of Zoölogy; Jerome C. Knowlton, A. B., Marshall Professor of Law, and John W. Langley, S. B., Non-resident Lecturer on the Metallurgy of Steel.

The following appointments for one year were made: George W. Whyte, B. S., Instructor in Metallurgy and Assaying; David H. Browne, Instructor in Qualitative Analysis; F. G. Novy, M. S., Instructor in Hygiene; A. F. Lange, A. M., Instructor in German and Anglo-Saxon; Wm. W. Campbell, B. S., Instructor in Astronomy; Alexander Ziwet, C. E., Instructor in Mathematics; P. B. Marcon, Ph. D., Instructor in French; Joseph H. Drake, A. B., Instructor in Latin; Frank N. Cole, Ph. D., Instructor, and afterwards (in July) Acting Assistant Professor of Mathematics; Lewis A. Rhoades, A. M., Instructor in German; Charles W. Belser, A. B., Instructor in German and French.

It was also voted that C. G. Taylor, B. S., Superintendent of Shops, should be deemed a member of the Faculty of the Literary Department, with the rank of Assistant Professor.

At the July meeting Professors Frothingham and Maclean tendered their resignations which were accepted. The vacancies thus caused were filled

by the election of C. B. Nancrede, M. D., as professor of Surgery and Clinical surgery, and of Flemming Carrow, M. D., as Professor of Ophthalmic and Aural Surgery, and Clinical Ophthalmology, Paul C. Freer, Ph. D., M. D., was chosen Lecturer on General Chemistry in the Literary and Medical Departments, and William H. Howell, Ph. D., Lecturer on Physiology and Histology in the same Departments. The following appointments to the Homœopathic Faculty were made: Charles Gatchell, M. D., Professor of the Theory and Practice of Medicine, Charles S. Mack, A. B., M. D., Professor of Materia Medica and Therapeutics in the place of Dr. Arndt, resigned, and D. A. McLachlan, M. D., was transferred from the chair of Theory and Practice to that of Ophthalmology, Otology and Pædology. The title of A. H. Pattengill, A. M., was changed from Associate Professor to Professor of Greek, and that of Otis C. Johnson, A. M., from Assistant Professor to Professor of Applied Chemistry. T. C. Trueblood, A. M., was appointed Assistant Professor of Elocution, and Charles K. McGee, A. B., Instructor in General Chemistry. The following appointments for one year were made: Dr. James N. Martin, Acting Professor of Obstetrics and Diseases of Women and Children, Dr. C. Georg, Instructor in Materia Medica and Therapeutics, G. C. Huber, M. D. Instructor in Histology.

In the month of September the following appointments for one year were made: Hon. H. B. Brown, LL. D., Lecturer on Admiralty in the Law Department; George Hempl, A. M., Acting Assistant Professor of English and Rhetoric; Fred N. Scott, Ph. D., Instructor in English; James H. Tufts, A. B., B. D., Instructor in Philosophy; Mellen W. Haskell, Ph. D., Instructor in Mathematics; Frank C. Smith, B. S., Instructor in Quantitative Analysis; George W. Patterson, A. B., S. B., Instructor in Electrical Engineering; F. C. Hicks, A. M., Assistant in Political Economy; Wm. A. Campbell, M. D., Instructor in Anatomy.

Elmer Sanford, B. S., Instructor in Physiology, died on February 15, 1889, after a brief illness. Both as a student and as a teacher his work had awakened in the minds of those most familiar with it high expectations of his success in science. The impression made by his talent was heightened by his great modesty, simplicity of character, and devotion to duty.

The University has rarely, if ever, been called to a more serious loss than it sustained in the death on March 23, 1889, of George Sylvester Morris, Ph. D., Professor of Philosophy. He was appointed Professor of Modern Languages in 1870, and held that position until 1879, when he resigned to take a lectureship in philosophy in the Johns Hopkins University. In 1884 he was elected to the chair of philosophy in this University, and filled it until his death.

In both chairs he taught with eminent success. His learning in several fields was ample, in philosophy it may be regarded as pre-eminent. By his writings he was well and favorably known to scholars in philosophy on both sides of the Atlantic. As a teacher he impressed his pupils profoundly by his rich culture, the strength and elevation of his character, his reverent devotion to truth, and the inspiring ethical and religious spirit of all his philosophic thinking. He was cut down suddenly in the very prime of his strength, while large plans were yet unexecuted. We had hoped, as he had, that many years of his ripest and most fruitful work were before him. His name and his memory will ever be cherished as one of the choicest possessions of the University.

John W. Langley, S. B., M. D., Professor of General Chemistry and Metallurgy, who has been a member of the Literary and Medical Faculties for about fifteen years, has resigned his office to engage in other pursuits in Pittsburg, Pa. Imbued as he is with the true scientific spirit, he has by his skill as a chemist, a metallurgist, and a lecturer, rendered most valuable service to the University. Our regret at his resignation is mitigated by the fact that he is to give a brief course of lectures here on the metallurgy of steel.

Henry Sewall, Ph. D., M. D., has been compelled by ill health to resign the chair of physiology, which he had filled for seven years. Bringing the best methods of modern research and exposition to his work, he has by the organization of the Physiological Laboratory and by his lucid instruction awakened such an interest in his department that we greatly regret his resignation.

The Board of Regents have expressed in fitting terms the appreciation which they and all connected with the University have of the ability, learning, and professional skill of Professors Frothingham and Maclean, who have for many years been in the service of this institution.

The following degrees have been conferred:

DEGREES ON EXAMINATION.

Bachelor of Letters.....	15
Bachelor of Science (course in Biology).....	1
Bachelor of Science (in Mining Engineering).....	4
Bachelor of Science (in Mechanical Engineering).....	6
Bachelor of Science (in Civil Engineering).....	10
Bachelor of Science (in General Science).....	7
Bachelor of Philosophy.....	28
Bachelor of Arts.....	36
Master of Letters.....	1
Master of Science.....	2
Master of Arts.....	5
Doctor of Science.....	1
Doctor of Philosophy.....	2
Doctor of Medicine (Department of Medicine and Surgery).....	82
Bachelor of Laws.....	148
Pharmaceutical Chemist.....	41
Doctor of Medicine (Homoeopathic Medical College).....	21
Doctor of Dental Surgery.....	35
	445

HONORARY DEGREES.

Doctor of Laws.....	8
	448

The attendance of students was as follows:

DEPARTMENT OF LITERATURE, SCIENCE, AND THE ARTS.

Resident Graduates.....	41
Graduates studying <i>in absentia</i>	24
Candidates for Degree.....	631
Students not Candidates for a Degree.....	120
	826

DEPARTMENT OF MEDICINE AND SURGERY.

Resident Graduates.....	5
Third Year Students.....	89
Second Year Students.....	128
First Year Students.....	149
	371

PUBLIC INSTRUCTION.

DEPARTMENT OF LAW.

Seniors.....	149
Juniors	244
Special Students.....	8
	<hr/> 401

SCHOOL OF PHARMACY.

Resident Graduates.....	1
Second Year Students.....	48
First Year Students	57
	<hr/> 106

HOMŒOPATHIC MEDICAL COLLEGE.

Students—Total in College.....	78
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COLLEGE OF DENTAL SURGERY.

Students—Total in College.....	108
Total in University.....	<hr/> 1,886

The following statement shows the increase in numbers since 1884-5.

TOTAL ATTENDANCE.

In 1884-5.....	1,286
In 1885-6.....	1,301
In 1886-7.....	1,563
In 1887-8.....	1,667
In 1888-9.....	<hr/> 1,886

The attendance this last year was just 600 larger (46.7 per cent.) than it was four years ago. The gain last year over the preceding year by Departments was as follows: Literary, 79; Medical, 61; Law, 59; Pharmacy, 16; Dental, 4; the Homœopathic College lost one; total gain, 218. Of candidates for higher degrees in the Literary Department, the number has risen from 59 last year to 65 this year.

At the time of the closing of this Report it is clear that during the year just beginning the attendance will be much larger than ever before, and will considerably exceed 2,000.

The number of women in attendance during the last two years was as follows:

	1887-8	1888-9
Department of Literature, Science, and the Arts.....	194	207
Department of Medicine and Surgery	53	59
Department of Law.....	3	3
School of Pharmacy.....	2	3
Homœopathic Medical College.....	28	28
College of Dental Surgery.....	6	6
	<hr/> 284	<hr/> 301

The proportion of women is smaller by nearly one per cent. than it was last year. In 1887-8 they formed sixteen and nine-tenths of the whole body of students; in 1888-9 not quite sixteen per cent. In the Literary Department they number twenty-five per cent. of the whole, which is the same proportion as in 1886-7, and seven-tenths of one per cent. less than in 1887-8. Of the 65 candidates for higher degrees 13 were women.

The number of schools with which we have established the "diploma relation" continues to increase. Last year there were 58. This year there are 71, of which 46 are in Michigan; of those in other states, 19 are in Illinois, 3 in Minnesota, and one each in Pennsylvania, Ohio and Indiana. Several of the State Universities have imitated our example in setting up this kind of connection with the schools in their vicinity to their own great

advantage and to the advantage of the schools. No other system of coöperation of school and university has been found which brings them into so harmonious relations, and which impresses both so deeply with the fruitful truth that their interests are in large part identical, and that in order to discharge their full duty to the public they must work heartily together.

We have received this year one gift of peculiar interest and value. Mrs. Elisha Jones has placed in the hands of the Regents as trustees the sum of ten thousand dollars for the endowment of one or more classical fellowships. The holder of the fellowship is to receive five hundred dollars a year. He is to be appointed by a Board of Examiners, consisting of the President of the University, the Senior Professor of Greek, the Senior Professor of Latin, and two other Professors of the Academic Faculty, to be chosen by the above named appointees. To be eligible to the fellowship the student must have been for three semesters a member of the Academic Department, must have made distinguished proficiency in Greek and Latin, and must be a Bachelor of Arts of not more than two years' standing. When appointed he must make the Greek and Latin languages and literatures his chief subjects of study. The fellowship is tenable by one person for only two years. The second year may, if the Board of Examiners permit, be spent in study at Athens or Rome. An appointment to the fellowship has already been made.

We prize this gift by Mrs. Jones, because it is intended by her as a memorial of her husband, who gave so large a part of his life to the service of the University in instruction in the classics, because it will furnish such encouragement to advanced study of the ancient languages and literatures, and because as the first instance of the endowment of a fellowship in this University it may be reasonably expected to stimulate other large-hearted donors to endow fellowships. The Regents desire it to be understood, that as in this case they will whenever desired as trustees accept funds for the endowment of scholarships, fellowships, professorships or for aiding the University in any manner, and keep such funds forever entirely separate from all other funds of the University, and invest them to the best of their ability, and administer them so as to accomplish the objects of the donors.

It is a great mistake to suppose that we have not sore need of private benefactions with which to enlarge the usefulness of the University. There is not a penny at our disposal for the aid in any way of a poor student, however needy and meritorious he may be. The endowment of some of our professorships, the establishment of a fund for the more rapid increase of our libraries, the purchase of a playground, the erection of a gymnasium, any or all these modes of assistance would be most welcome to us and most suitable for private beneficence. Our work so grows upon our hands, the demands upon our resources so rapidly multiply, we are now cramped at so many points that, notwithstanding the great and continued generosity of the State, we cannot refrain from expressing the hope that our alumni and other generous men and women will, from time to time, supplement the legislative appropriations by donations for special purposes, as some of them have already done.

The work of the various departments has gone on smoothly and successfully during the year. The unprecedented number of new students, who have joined us, about four hundred, somewhat unduly crowded the sections in the more elementary studies, especially those beginning the modern languages and history. We have slightly increased the teaching force for the

modern languages. It is certain that we must soon add to our corps of instructors. The completion of the Engineering Laboratory will now enable us to handle more efficiently the increasing number of engineering students. But the rooms assigned to the study of civil engineering, in the south wing, are inadequate to the proper accommodation of the large classes crowded into them. We must soon find ample space for them somewhere. The great interest in the application of electricity to the arts of life has led us to establish a specific course in electrical engineering, as most of the scientific schools in the country have done. The demand for young men well trained in this branch is rapidly increasing, and we have regarded it as our duty to meet the call which is made on us for thorough instruction in it.

We have also decided to make a change of some importance in the requirements for admission. We have long desired to require some scientific training of students entering on the courses leading to the degrees of A. B. and Ph. B. We have delayed asking it, partly because some schools were ill-prepared to give the necessary instruction in science, and partly because it was thought difficult, if not impossible, for some schools which were prepared to teach elementary science to add it to the instruction we asked in other branches without unduly lengthening the period of preparatory study. But we believe the time has arrived when, by slight concessions on our part in certain requirements, and by some revision of the school courses, the result can be accomplished. Accordingly, students entering as candidates for A. B. or Ph. B. next year will be asked to present preparation in physics and botany. Some of the advantages anticipated from this change are the following: The classical students will have had the disciplinary advantage of a little scientific training. They will be better fitted to make wisely their elections between linguistic and scientific studies, when the time for election comes. The elementary teaching of physics and botany can be dropped from the collegiate course, since the candidates for the degrees of B. S. and B. L. are already required to have the preparation in those branches now demanded of the students of Latin and Greek. The classical courses will be made more popular in the schools. Many persons object to them now, because they provide no instruction in science. For these reasons we regard the modification of our requirements as a marked improvement.

We have also altered the requirements for admission to the course leading to the degree of B. L. We have decided to ask for preparation in three sciences instead of in two only, or for preparation in the modern languages in lieu of that in the sciences. We find on inquiry that a pretty large number even of the high schools in the smaller towns can furnish good preparation in German, even when they are indifferently prepared to teach the sciences in the modern methods. We prefer to encourage them to do what they can do well rather than to attempt what they cannot do well.

We do not desire to make frequent changes in our requirements for admission. But these now announced have been under consideration for some years and have been made only after very full consultation with a large number of superintendents, principals and other teachers in our high schools. A little time may be required for the schools to adjust their courses fully to our requirements, and during that time we shall be reasonable and generous in our interpretation of the requirements. Our fixed purpose is to work in the most harmonious coöperation with our schools and never to make any demands of them which they cannot fairly meet. We

may at this time, as we have so often before had occasion to do, express our grateful appreciation of the heartiness with which they have attempted to comply with our request for a change in their courses. But we believe that the change will be as helpful to them as it will be to us.

There has not been a single case in the Literary Department calling for discipline on account of misconduct. Indeed of late years such cases have become exceedingly rare. Nothing could be more gratifying than the general demeanor of the students and their relations with their teachers. The days when riotous behavior, gross immorality, and a spirit of insubordination were deemed necessary to prevent college life from becoming dull, if they were ever known here, as they certainly were in some colleges, are apparently gone, never to return.

The Department of Medicine and Surgery, notwithstanding the absence of some of its regular professors, and the public discussion to which the policy marked out for it by the Regents has been subjected, has had a successful year. The vacancies caused by the very unusual number of four resignations of professors during the year have been filled by men, who, we have good reason to hope, will do their full part in maintaining the reputation of the school. The curriculum has been very carefully revised and, it is believed, improved. Under the conviction that in order to raise the standard of medical education a more prolonged course than three years is necessary, the authorities have decided that students hereafter shall be required to have given four years to medical study before graduating, though for the present one of the years may be spent in the office of a preceptor.

The legislature having granted us fifty thousand dollars for the erection of a new hospital on condition that the city of Ann Arbor should give twenty-five thousand dollars for the same purpose, the citizens of Ann Arbor voted almost unanimously to authorize the gift on which the legislative appropriation was conditioned. The vote was, ayes, 936; nays, 10. When we remember that the city has only about ten thousand inhabitants, and that among them are hardly any men of large wealth, it must be conceded that their act is one of great generosity. A gift proportionately great by a city as populous as Detroit would be more than half a million dollars.

It is our purpose to build a good hospital, though of course the sum at our disposal will not suffice for the erection of a large one. We believe that on the completion of this new structure our clinical facilities may be made reasonably satisfactory.

The Hygienic Laboratory, which holds a common relation to the Medical and the Literary Department and a certain public relation to the State, has received as many students as in its unfinished rooms it could accommodate. A considerable number of analyses, which were of importance in determining sanitary questions for towns and cities in Michigan, have been made. Important researches concerning the origin and cause of diseases, especially of typhoid fever have been carried on. The appropriation made by the legislature has now enabled us to complete the furnishing and equipment of the Laboratory so that a much larger number of students can be accommodated hereafter, and research can be continued more advantageously.

The Law Department has had a year of unusual prosperity. Never but once before in its history, even when the course was only two-thirds as long as it is now, and when law schools were few in number, did the attendance reach that of the year past. It is certain that during the coming

year the number of students will be greater than ever before. The demands on the student for work are more exacting than they have been heretofore. The experiment of calling in non-resident lecturers for brief courses on special topics has been continued with satisfactory results. The question of extending the course to three years for such students as choose to take it, and to have their extended study recognized by some appropriate degree, has been and still is under consideration. The ease with which students are admitted to practice in this and some other States after a briefer term of study presents some obstacles to requiring three years for graduation. But the fact that some of the leading schools in the country have extended their course to three years forces on us the inquiry how long we can afford to ask less work than they, as a condition of winning the degree of Bachelor of Laws.

The work of the Homœopathic Medical College has been carried on quietly and successfully. Its requirements for graduation are so much higher than those of most of the Homœopathic Schools of Medicine in this country that we need not be surprised that the number of its students is not yet so large as its friends had anticipated. But the sterling character of the instruction it gives must in due time attract such students as desire thorough training. The scope of its work is to be somewhat enlarged at once.

The thorough course of our school of pharmacy, which has given it a national reputation, draws to its classes a large number of well prepared students. To accommodate them and the increasing number of students from the other departments who engage in the study of chemistry, it has become necessary to make another addition to our Chemical Laboratory. Although we can now accommodate nearly three hundred students at our tables, we have been obliged for the past year to set apart a room in University Hall for chemical work. This has involved some risk from fire to that building, and has subjected the occupants of some of our recitation rooms to inconvenience from the fumes and odors generated in the laboratory work. The enlargement of the Laboratory, which the generosity of the legislature enables us now to make, will not only furnish us the needed room for tables, but will also furnish another fine lecture room and accommodations for our pharmaceutical and chemical museum, which has never been properly provided for.

The Dental College reaps the reward of a high reputation by being crowded with more students than it has room to take care of. Clearly, the enlargement of its quarters cannot be postponed much longer, unless we set a limit to the number of its students. The graded three years' course is now well organized. It is gratifying to be able to infer from the large attendance that the sense of the profession is favorable to our increase in requirements for graduation.

The increase in the number of the students in our professional schools has been so great that in my opinion the time has come for us to raise the requirements for admission to them. It would not be expedient at once to lift the standard to the height which we may hope to attain in a few years. But we can make some decided advance. It is certain that the legal and medical and dental professions will sustain us in such an effort. We may temporarily sustain some slight diminution in numbers, though that result is not certain. But we shall gain in quality more than we shall lose in

quantity. It is to be hoped that the change here recommended may be undertaken with courage and zeal.

The report of the Librarian shows that the total number of volumes in all our libraries is 70,041, of pamphlets 14,626, of maps 514. The increase for the year has been, of volumes 2,282, pamphlets 734, of maps 250. So far as it has been possible to record the number of volumes called for during the year, it appears that 95,076 volumes have been used. Notwithstanding the appropriations made for the library by the legislature, we greatly need ampler means for the purchase of books. To supply the wants of a University like this, we need at once at least twice as many volumes as we now possess.

From the reports of the Curators of the Museums, I gather the following facts:

Considerable additions have been made to the Museum of Zoölogy. Chief among these additions are specimens brought from the Philippine Islands by Professor Steere last year. A valuable collection of several thousand beetles, chiefly North American, has been presented by Dr. Harold B. Wilson of Detroit. A collection of Mexican birds (ten species) new to our museum was given by Mr. Arthur Moore. A considerable number of other donors have sent zoölogical specimens of interest. Some progress has been made in identifying and classifying our zoölogical collections. The need for supplying cases to our only remaining vacant room is urgent. We have abundance of material for filling them. It is highly desirable that new registration books should be provided and that the collections should be registered anew.

The mineralogical collection has been enriched by a valuable set of minerals from Colorado and adjoining territories, through the generosity of Richard Pearce, Esq., of Denver.

The most important additions to the Art Museum are the oil portrait of Philo Parsons, Esq., of Detroit, the donor of the Parsons Library, and the cast of the statue of Gen. Cass, which was placed by Michigan in the rotunda of the Capitol at Washington. The sculptor is D. O. French. It is due to the kind offices of Mr. Philo Parsons and the generosity of Mr. French that we have received this cast of the statue, which does so high honor to the artist. Few, if any, more successful portrait statues have come from the chisel of any American sculptor. It is eminently fitting that the statue of Cass, who played so important a part in the early history of this State, and who was once a Regent of the University, should stand in our halls.

Dr. Rominger has made some valuable additions to the Rominger collection of paleontology, and has made several hundred thin sections of specimens for microscopic study.

There is nothing of special importance to report from our other museums.

The legislature evinced a sympathetic appreciation of our needs by passing a generous appropriation bill, with very few dissenting votes in the House and not one in the Senate. It provided the following supplies for the calendar years of 1889 and 1890:

	1889.	1890.
Repairs.....	\$ 4,000 00	\$ 4,000
Homoeopathic College and Hospital.....	8,200 00	8,200
University Hospital.....	6,000 00	6,000
Dental College.....	10,000 00	10,000
Rogers Collection—transporting and placing.....	5,000 00	
Books for Libraries.....	7,500 00	7,500

Contingent Expenses.....	12,500 00	12,500
Completion of Engineering Laboratory.....	2,000 00	
Completion of Boiler House and Steam Connections.....	5,980 45	
Construction of Anatomical Laboratory.....	7,958 68	
Equipment of Engineering Laboratory.....	4,000 00	8,000
Instruments for Department of Civil Engineering.....	1,000 00	1,000
Furniture and Apparatus for Hygienic Laboratory.....	3,000 00	3,000
Enlargement of Dental College Building.....	3,000 00	
Fence around University Grounds.....	500 00	
Addition to Chemical Laboratory.....	10,500 00	10,500
New Hospital.....	25,000 00	25,000
	<hr/>	<hr/>
	\$116,089 08	\$90,700

That makes the total appropriation for two years \$206,789.08.

Our Finance Report shows that by great vigilance and economy and by the aid of large receipts from our exceptionally large attendance we have been able to keep our expenses within our receipts. The opportunities, we may say the necessities, for enlarging and improving our work are so constantly pressing us for larger outlay in one direction and another that our General Fund has always to be guarded with the greatest care. The Auditing Board, who are charged with minor expenditures for the current supply of the needs of the several departments, often find themselves under the unpleasant necessity of refusing requisitions which they would gladly grant. What has often been said in these Reports cannot be too often repeated or too deeply impressed on the friends of the University, namely, that however urgent are many special needs of this institution, its greatest need is a permanent addition to its General Fund. It is to be ardently hoped that either by private benefactions or by legislative action this result may be attained.

JAMES B. ANGELL,
President.

APPENDIX A.

FINANCE REPORT.

To the Honorable Board of Regents:

Your Finance Committee herewith respectfully submit their estimate of receipts and expenditures for the fiscal year ending June 30, 1890, also the Treasurer's statement of receipts and disbursements for the year ending June 30, 1889.

Your committee has caused the books and vouchers of the Secretary and Treasurer to be carefully examined, each item checked and verified and are pleased to report that only slight errors have been found and those of a character almost impossible to avoid in such a mass of accounts and separate transactions.

It will be noticed that the expected deficit at the close of the last fiscal year does not appear. This fact arose partly from the increase in students' fees and partly on account of certain unexpended balances. In this connection your attention is called to the fact that notwithstanding the large increase in receipts estimated for the present fiscal year,

they are nearly equalled by the expenditures as estimated. The only point of elasticity in our finances appears to be in the students' fees. It is suggested as unwise to draw too heavily upon the estimated increase in these fees by permanent appropriations. All which is respectfully submitted.

CHARLES J. WILLETT,
Chairman.

ESTIMATE OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDING JUNE 30, 1890,

ESTIMATED RECEIPTS.

Balance in Treasury, July 1, 1889.....	\$15,617 98
To be received from the State on the following accounts :	
To be received from University Interest.....	38,000 00
" " " 1-20 Mill Tax.....	47,272 50
" " " Homo. College and Hospital.....	14,200 00
" " " University Hospital.....	6,000 00
" " " College of Dental Surgery.....	10,000 00
" " " Equipment for Hygienic Laboratory.....	3,000 00
" " " Contingent Expenses.....	12,500 00
" " " Books for Libraries.....	7,500 00
" " " Repairs.....	4,000 00
" " " Fence.....	500 00
" " " Purchase of Instruments for Engineering Department.....	1,000 00
" " " Addition to the Chemical Laboratory.....	10,500 00
" " " Completion and Equipment of Engineering Laboratory.....	6,000 00
" " " Enlargement of Dental College Building.....	3,000 00
" " for Purchase of a Site and Erection of a Hospital,Building.....	25,000 00
" " " Transportation of the Rogers' Collection.....	5,000 00
" " " Overdraft on Steam Heating Plant.....	5,980 45
" " " Cost of Anatomical Building.....	7,968 68
" " " Sale of Dental Supplies.....	2,500 00
" " " Sales at University Hospital.....	800 00
" " " Sales at Homœopathic Hospital.....	200 00
" " " Interest on Bank Deposits.....	1,000 00
" " " Students' Fees.....	85,000 00
	<u>\$312,479 51</u>

ESTIMATED DISBURSEMENTS.

For salaries of Professors, Officers and Employés :	
In the College of Dental Surgery.....	\$8,350 00
" Homœopathic College.....	11,200 00
" University Hospital.....	2,500 00
In all other Departments.....	148,144 18
For Alterations and Repairs.....	4,680 00
Current Expenses in General Library.....	500 00
Fuel and Lights.....	12,000 00
Care of Grounds.....	500 00
Postage.....	1,000 00
Insurance.....	2,000 00
Calendar, Regents' Proceedings and Miscellaneous Printing.....	2,500 00
Current Expenses of Museum.....	300 00
Supplies for Chemical Laboratory.....	9,000 00
" " Botanical ".....	500 00
" " Histological ".....	300 00
" " Physiological ".....	500 00
" " Engineering ".....	1,000 00

For Supplies for Physical Laboratory	\$500 00
" " Zoological " 	600 00
" " General Chemistry.....	1,000 00
Current Expenses in the Department of Civil Engineering.....	500 00
" " Astronomical Observatory.....	300 00
Anatomical Material.....	8,000 00
Advertising the Literary Department.....	400 00
" " Law " 	400 00
" " Medical " 	300 00
" " Pharmacy " 	200 00
Use of Water Privilege.....	125 00
Purchasing and filling Diplomas	800 00
Commencement Expenses.....	1,300 00
Taxes and Improvements on Lots in Springwells.....	300 00
Expenses on General Catalogue.....	1,000 00
Purchase of Dental Supplies.....	2,500 00
Current Expenses of University Hospital.....	4,500 00
" " Dental Department.....	1,150 00
" " Homoeopathic College and Hospital	4,000 00
Purchase of Books for Libraries.....	8,368 20
" " Apparatus for Natural Philosophy.....	993 65
Equipment of Hygienic Laboratory.....	3,000 00
Current Expenses of Pathological Laboratory.....	600 00
Completion and Equipment of Engineering Laboratory.....	6,000 00
Purchase of Instruments for Civil Engineering.....	1,000 00
Addition to the Chemical Laboratory.....	10,500 00
Purchase of Site and Erection of a Hospital Building.....	25,000 00
Enlargement of Dental College Building.....	3,000 00
Fence.....	500 00
Scientific Laboratories.....	925 00
Apparatus for Physiological Laboratory.....	152 00
Contingent Expenses.....	12,500 00
Estimated Balance on hand June 30, 1889.....	11,857 50
	<hr/>
	\$312,479 51

TREASURER'S REPORT.

To the Finance Committee, Board of Regents, University of Michigan:

GENTLEMEN—Herewith I submit my annual report for the year ending June 30, 1889.

Respectfully,

H. SOULE, Treasurer.

RECEIPTS.

Balance in Treasury July 1, 1888.....	\$3,327 57
From State Treasurer, account Current Expenses.....	35,729 37
" " " Special Appropriation.....	50,450 00
Goethe Fund. Interest on Deposit.....	48 71
Earnings of the University.....	101,873 93
	<hr/>
	\$246,427 57

DISBURSEMENTS.

Paid General Fund Accounts.....	\$167,068 70
Paid Special Fund Accounts.....	62,740 94
Balance in Treasury June 30, 1889.....	15,617 93
	<hr/>
	246,427 57

The following detailed and classified statements exhibit the condition of the several funds:

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RECEIPTS TO THE GENERAL FUND.

Balance in Treasury July 1, 1888.....		\$3,377 06
From State Treasurer, account 1-20 Mill Tax.....	\$47,372 50	
" " University Interest.....	38,456 87	
Auditor General, Account University Hospital.....	111 85	
Sale of Material, " " ".....	2,408 62	
" " " Homoeopathic Hospital.....	351 91	
" " " Dental Operating Room.....	3,056 22	
" " " to Medical Schools.....	143 50	
First National Bank of Ann Arbor, Interest.....	2,587 33	
Miscellaneous Sources.....	582 75	
Students' Fees, Account Medical Department.....	\$15,055 00	94,971 45
" " " Literary Department.....	25,815 00	
" " " Law Department.....	18,910 00	
" " " Dental Department.....	4,470 00	
" " " Homoeopathic Department.....	2,580 00	
" " " Chemical Laboratory.....	10,806 85	
" " " Mechanical Laboratory.....	681 00	
Students' Fees, Account Pharmacy.....	4,285 00	
" " " Key Deposits.....	258 00	
" " " General Chemistry.....	180 00	
" " " Practical Anatomy.....	3,370 00	
" " " Botanical Laboratory.....	219 00	
" " " Physiological Laboratory.....	90 00	
" " " Zoölogical ".....	90 00	
" " " Microscopical ".....	301 00	
" " " Histological ".....	741 00	
" " " Pathological ".....	286 00	
" " " Hygienic ".....	354 19	
" " " Diplomas.....	4,490 00	
		92,681 84
		\$ 195,980 35
Students' Fees, Total.....	\$92,681 84	
" " Refunded.....	5,465 96	
" " Net.....	\$87,215 88	

DISBURSEMENTS FROM THE GENERAL FUND.

General Pay Roll of Officers and Employees.....			\$136,144 16
Vouchers Paid, Account Students' Fees Refunded.....			5,465 96
"	"	Fuel and Lights.....	7,986 06
"	"	General Library.....	192 85
"	"	Museum.....	381 24
"	"	Advertising Medical Department.....	209 13
"	"	" Law Department.....	119 00
"	"	" Pharmacy Department.....	54 60
"	"	Miscellaneous Printing.....	408 99
"	"	Civil Engineering.....	633 86
"	"	Chemical Laboratory.....	8,337 17
"	"	Histological Laboratory.....	117 06
"	"	Botanical Laboratory.....	104 06
"	"	Physical Laboratory.....	19 03
"	"	Physiological Laboratory.....	90 81
"	"	Microscopical Laboratory.....	34 85
"	"	Mechanical Laboratory.....	696 81

PUBLIC INSTRUCTION.

Vouchers Paid, Account Zoölogical Laboratory.....	\$312 86	
" " " Pathological Laboratory.....	653 25	
" " " Hygienic Laboratory.....	38 48	
" " " Anatomical Laboratory.....	178 78	
" " " General Uhemistry.....	267 76	
" " " Astronomical Observatory.....	78 63	
" " " Dental Operating Room.....	2,396 64	
" " " Anatomical Material.....	1,604 58	
" " " Postage.....	629 80	
" " " Calendar.....	50 00	
		\$167,068 70
Balance in Treasury June 30, 1889.....		26,911 65
		<u>\$196,980 35</u>

SPECIAL FUND ACCOUNTS.

HOMOEOPATHIC MEDICAL COLLEGE.

Receipts.

Balance in Treasury July 1, 1888.....	\$ 926 49	
From State Treasurer.....	2,000 00	
		<u>\$3,926 49</u>

Disbursements.

Paid Salaries of Professors and Employés.....	\$ 2,300 00	
Paid Vouchers for Expenses.....	158 81	
Balance in Treasury June 30, 1889.....	1,472 68	
		<u>\$3,926 49</u>

HOMOEOPATHIC MEDICAL COLLEGE AND HOSPITAL.

Receipts.

Balance in Treasury July 1, 1888.....	\$ 3,817 96	
From State Treasurer.....	6,200 00	
Balance Overdrawn June 30, 1889.....	1,972 49	
		<u>\$11,990 42</u>

Disbursements.

Paid Salaries of Professors and Employés.....	\$ 7,640 00	
Paid Vouchers for Expenses.....	4,350 42	
		<u>\$11,990 42</u>

GENERAL LIBRARY.

Receipts.

From State Treasurer.....	\$5,000 00	
		<u>\$5,000 00</u>

Disbursements.

Balance Overdrawn July 1, 1888.....	\$ 438 79	
Paid Vouchers for Expenses.....	3,708 01	
Balance in Treasury June 30, 1889.....	853 20	
		<u>\$5,000 00</u>

UNIVERSITY HOSPITAL.

Receipts

Balance in Treasury July 1, 1888.....	\$ 636 22	
From State Treasurer.....	2,500 00	
Balance Overdrawn June 30, 1889.....	2,060 40	
		<u>\$5,176 62</u>

Disbursements.

Paid Salaries of Resident Physician and Employés.....	\$2,015 00	
Paid Vouchers for Expenses.....	3,161 62	
		<u>\$5,176 62</u>

UNIVERSITY OF MICHIGAN.

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CONTINGENT.

Receipts.

From State Treasurer.....	\$6,250 00	
Balance Overdrawn June 30, 1889.....	428 44	
		<u>\$6,678 44</u>

Disbursements.

Balance Overdrawn July 1, 1888.....	\$426 11	
Paid Vouchers for Expenses.....	6,247 33	
		<u>\$6,673 44</u>

REPAIRS.

Receipts.

Balance in Treasury July 1, 1888.....	\$638 44	
From State Treasurer.....	5,000 00	
		<u>\$5,638 44</u>

Disbursements.

Paid Vouchers for Expenses.....	\$5,209 09	
Balance in Treasury June 30, 1889.....	629 35	
		<u>\$5,838 44</u>

PHYSIOLOGICAL LABORATORY.

Receipts.

Balance in Treasury July 1, 1888.....	\$152 14	
		<u>\$152 14</u>

Disbursements.

Balance in Treasury June 30, 1889.....	\$152 14	
		<u>\$152 14</u>

COLLEGE OF DENTAL SURGERY.

Receipts.

Balance in Treasury July 1, 1888.....	\$495 26	
From State Treasurer.....	4,000 00	
Balance Overdrawn June 30, 1889.....	4,508 48	
		<u>\$8,998 76</u>

Disbursements.

Paid Salaries of Professors and Employés.....	\$3,441 67	
Paid Vouchers for Expenses.....	557 09	
		<u>\$3,998 76</u>

ENGINEERING LABORATORY.

Receipts.

Balance in Treasury July 1, 1888.....	\$1,026 42	
		<u>\$1,026 42</u>

Disbursements.

Paid Vouchers for Expenses.....	\$30 38	
Balance in Treasury June 30, 1889.....	946 04	
		<u>\$1,026 42</u>

GOETHE FUND.

Receipts.

Balance in Treasury July 1, 1888.....	\$437 95	
From Interest on Deposits.....	46 71	
		<u>\$484 66</u>

PUBLIC INSTRUCTION.

Disbursements.

Paid Vouchers for Expenses	\$31 26	
Balance in Treasury June 30, 1889.....	453 41	
		<u>\$484 66</u>

DEPARTMENT OF NATURAL PHILOSOPHY—(PHYSICAL LABORATORY).

Receipts.

Balance in Treasury July 1, 1888.....	\$1,062 40	
From State Treasurer.....	1,000 00	
		<u>\$2,062 40</u>

Disbursements.

Paid Vouchers for Expenses.....	\$1,062 75	
Balance in Treasury June 30, 1889.....	999 65	
		<u>\$2,062 40</u>

REMOVAL OF ROGERS' GIFTS.

Receipts.

Balance overdrawn June 30, 1889.....	\$4,841 81	
		<u>\$4,841 81</u>

Disbursements.

Balance Overdrawn July 1, 1888.....	\$4 00	
Paid Vouchers for Expenses.....	4,837 81	
		<u>\$4,841 81</u>

SCIENTIFIC LABORATORIES.

Receipts.

From State Treasurer.....	\$15,000 00	
		<u>\$15,000 00</u>

Disbursements.

Balance Overdrawn July 1, 1888.....	\$1,008 20	
Paid Vouchers for Expenses.....	12,071 50	
Balance in Treasury June 30, 1889.....	925 30	
		<u>\$15,000 00</u>

CHEMICAL VAULT.

Receipts.

Balance in Treasury July 1, 1888.....	\$400 00	
		<u>\$400 00</u>

Disbursements.

Paid Vouchers for Construction.....	\$400 00	
		<u>\$400 00</u>

BOILER HOUSE.

Receipts.

Balance Overdrawn June 30, 1889.....	\$5,984 92	
		<u>\$5,984 92</u>

Disbursements.

Balance Overdrawn July 1, 1888.....	\$5,450 66	
Paid Vouchers for Expenses.....	484 26	
		<u>\$5,934 92</u>

HYGIENIC LABORATORY.

Receipts.

Balance Overdrawn June 30, 1889.....	\$1 95	
		<u>\$1 95</u>

Disbursements.

Paid Vouchers for Expenses.....	\$1 95	
		<u>\$1 95</u>

ADDITIONAL SALARIES.

<i>Receipts.</i>		
From State Treasurer.....	\$2,500 00	
		<u>\$2,500 00</u>
<i>Disbursements.</i>		
Balance Overdrawn July 1, 1888.....	\$2,500 00	
		<u>\$2,500 00</u>

The balances in the Treasury June 30, 1889, are as follows:

SPECIAL FUNDS.

Homoeopathic College.....	\$1,472 68	
General Library.....	858 20	
Physiological Laboratory.....	152 14	
Natural Philosophy.....	992 65	
Engineering Laboratory.....	946 04	
Repairs.....	629 35	
Goethe Fund (this is a Donation Fund).....	468 41	
Scientific Laboratories.....	925 80	
		<u>\$6,484 77</u>
Less Overdrawn, accounts Homoeopathic College and Hospital.....	\$1,973 49	
" " " University Hospital.....	2,060 40	
" " " Dental College.....	4,503 48	
" " " Removal of Rogers' Gifts.....	4,841 81	
" " " Contingent.....	423 44	
" " " Boiler House.....	5,934 92	
" " " Hygienic Laboratory.....	1 95	
		<u>\$19,728 49</u>
Special Funds Overdrawn June 30, 1889.....		<u>\$13,298 72</u>

GENERAL FUND.

Balance in Treasury June 30, 1889.....	\$23,911 65	
Less Amount to Special Accounts Overdrawn.....	12,298 72	
Net Balance June 30, 1889.....		<u>\$11,612 93</u>

APPENDIX C.

EXAMINATIONS FOR DEGREES.

The following examinations were held in 1889:

CANDIDATES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

YELIJO ONO, PH. B.

Thesis—The Industrial Revolution in Japan. *Subjects for Examination*: Major—Political Economy. Minors—1. Psychology. 2. History of British Philosophy.

FRED NEWTON SCOTT, A. M.

Thesis—Italian Critics of the Renaissance as Source for the Earliest English Criticism. *Subjects for Examination*: Major—English Literature (Chaucer). Minors—1. Italian. 2. Philosophy.

CANDIDATES FOR THE DEGREE OF DOCTOR OF SCIENCE.

ERWIN F. SMITH, B. S. (Biol.)

Thesis—Ætiology and Pathology of Peach Yellows. *Subjects for Examination*: Major—Parasitic Fungi. Minors—1. Sanitary Science. 2. Vertebrate Morphology, with special reference to minute structure.

CANDIDATES FOR THE DEGREE OF MASTER OF ARTS.

ERNEST ALANSON BALCH, A. B.

Thesis—Bryant as a Poet of Nature. *Subjects for Examination*: Major—English Literature. Minors—1. Philosophy. 2. Pedagogy.

HUGH ANDREW GRAHAM, A. B.

Thesis—Policy of the United States toward Immigration. *Subjects for Examination*: Major—Political Economy. Minors—1. Pedagogy. 2. History.

MARY LOUISE JONES, A. M.

Thesis—The Ethical Value of Tennyson's Art. *Subjects for Examination*: Major—English Literature. Minors—1. Pedagogy. 2. Philosophy.

JAMES HERVEY SMITH, A. B.

Thesis—The Action of Thermal and Mineral Waters on Iron Ores. *Subjects for Examination*: Major—Chemistry. Minors—1. Geology. 2. Physics.

IDA MARIA STREET, A. B.

Thesis—Some Artistic Principles formulated by Ruskin, applied to Robert Browning's Dramas. *Subjects for Examination*: Major—English Literature. Minors—1. Philosophy. 2. Anglo-Saxon.

WILLIAM MICHAEL ZUMBRO, A. B.

Thesis—The Compromises of the Constitution. *Subjects for Examination*: Major—History. Minors—1. English Literature. 2. Political Economy.

CANDIDATES FOR THE DEGREE OF MASTER OF SCIENCE.

HENRY BENNER, B. S.

Thesis—Hyberbolic Functions. *Subjects for Examination*: Major—Mathematics. Minors—1. Astronomy. 2. Physics.

CHARLES W. DODGE, B. S. (Biol.)

Thesis—The Physiological Anatomy of *Acer Saccharinum*. *Subjects for Examination*: Major—Botany. Minors—1. Zoölogy. 2. Physiology.

CANDIDATES FOR THE DEGREE OF M. L.

ELISHA MONROE HARTMAN, B. L.

Subjects for Examination: Major—British Philosophy. Minor—1. History of the English Drama. 2. Comparative Constitutional Law.

UNDERGRADUATES, CANDIDATES FOR GRADUATES' DEGREES ON THE
UNIVERSITY SYSTEM.

BACHELOR OF SCIENCE.

ALBERT MORTON SHAW.

Subjects for Examination: Major—Zoölogy. Minors—1. Physiology. 2. Physiological Chemistry.

BACHELOR OF PHILOSOPHY.

ELIZA READ SUNDERLAND.

Subjects for Examination: Major—Philosophy. Minors—1. History. 2. German.

BACHELOR OF LETTERS.

JAMES WARE ADAMS.

Subjects for Examination: Major—History. Minors—1. English Literature. 2. Political Economy.

MICHIGAN STATE NORMAL SCHOOL.

REPORT OF THE PRINCIPAL FOR THE SCHOOL YEAR 1888-89.

To the State Board of Education:

GENTLEMEN: I respectfully submit the following report of condition and progress of the Michigan State Normal School for period indicated above:

SUMMARY OF ATTENDANCE.

Enrollment in Normal Department.....	808
" " Conservatory of Music—not counted above.....	6
" " Training School :	
Kindergarten.....	31
Primary Grades.....	94
Grammar Grades.....	145
	<hr/>
	270
Total, all transfers excluded.....	1079

The following figures exhibit the annual increase in enrollment in the Normal School proper, for the eight years next preceding the year now reported upon:

1881-2	330	1885-6	628
1882-3	398	1886-7	675
1883-4	475	1887-8	714
1884-5	519	1888-9	808

The numbers graduated in the several courses for three years have been as follows:

In June, 1887.....	100
" " 1888.....	117
" " 1889.....	108
	<hr/>
Total for three years.....	320

The courses pursued and completed by these graduates are as follows:

In regular four years' courses.....	122
In three years' courses.....	171
In three years' courses, with a language added.....	27
	<hr/>
	320

NAMES OF PROFESSORS, INSTRUCTORS, ETC.

John M. B. Sill, *Principal*.
 Daniel Putnam, *Vice-Principal, Mental and Moral Science, and Theory and Art of Teaching*.
 Julia Anna King, *Preceptress, History and Civil Government*.
 Frederick H. Pease, *Music and Director of Conservatory of Music*.
 Charles Fitz Roy Bellows, *Mathematics*.
 August Lodeman, *German and French Languages*.
 Austin George, *Political Science, and Director of Training School*.
 Mrs. Lucy A. Osband, *Natural Sciences*.
 Edwin A. Strong, *Physical Sciences*.
 Florus A. Barbour, *English Language and Literature*.
 John Goodison, *Drawing and Geography*.
 Benjamin L. D'Ooge, *Latin and Greek Languages*.
 William H. Brooks, *Critic in Grammar Grades of Training School*.
 Lois McMahon, *Assistant in English Language and Literature*.
 Annie A. Paton, *Assistant in History and German*.
 Abbie Pearce, *Assistant in English and French*.
 Charles E. St. John, *Assistant in Physical Sciences*.
 Willis A. Weeks, *Assistant in Latin and Greek*.
 J. R. Cleary, *Teacher of Penmanship*.
 Amelia Hale, *Instructor in Mathematics*.
 Wilbur P. Bowen, *Instructor in Mathematics*.
 Clarence D. McLouth, *Assistant in Natural Sciences*.
 George F. Key, *Assistant in Mathematics*.
 Hiram W. Miller, *Assistant in English Language and Literature*.
 Ella M. Hayes, *Instructor in History*.
 Nina C. Vandewalker, *Critic in Primary Grades of Training School*.
 Mary Lockwood, *Kindergartner*.
 Florence Goodison, *Librarian*.
 Frances L. Stewart, *Clerk*.

GRADUATES OF JUNE, 1889—JUNE 28.

Amelia Mae Andrews, Eng., Dexter.	Thos. Arthur Conlon, Sci. Sh. Lat., Traverse City.
Augusta Harriet Adams, Eng., Oakwood.	Alma Cook, Eng. with Sh. Ger., Hanover.
Harriet Allington, Eng., Richmond.	George Edward Carroll, Sci. Sh. Lat., Summit.
Sadie Ann Allington, Eng., Richmond.	Rachel Cook, Lat. Ger., Urania.
Edith Florence Blythe, Eng., Marquette.	Mary F. Camp, Lat. Ger., Ypsilanti.
Fannie Begole, Sci. Sh. Ger., Belleville.	Lewis S. Camburn, Eng., Macon.
Anna Jane Brown, Eng., Petersburg.	Mary Elizabeth Cook, Eng., Flat Rock.
Mary Adele Bishop, Eng., Almont.	Dora Augusta D'Oille, Eng., Caro.
Cora Ellen Buntun, Eng., Newcomb.	Lecia May Dwyer, Eng., Dexter.
Georgiana Bowly, Eng., Ovid.	Michael Dorgan, Eng., Gobleville.
Leda Bellows, Sp. Mus., Ypsilanti.	Thomas Dorgan, Eng., Gobleville.
Albert Thaddeus Brott, An. Cl., Ypsilanti.	Sara den Bleyker, Sci. Lat., Kalamazoo.
Alice Lora Brown, Eng., Ypsilanti.	Daniel Waterman Duffield, Sp. Mus., Detroit.
Roger Charles Boyle, Eng., Deerfield.	Lena Eisenlord, Lat. Ger., Farmington.
Alanson S. Bates, Sci., Mt. Clemens.	Amelia Auxonette Edwards, Eng., New Haven.
Isabella Marion Becker, Eng., Dayton.	Ida May Fuller, Eng., Ypsilanti.
Jennie Louise Bement, Mod. Cl., Maple Rapids	Agnes Luella Fessenden, M. Cl., Romeo.
Catherine Maud Cady, Lat. Ger., Wayne.	Jessie Marie Golden, Eng., Amherstburg, Ont.
Minnie Florence Coleman, Lit., Decatur.	Alice Kent Green, Eng., Lansing.

GRADUATES—*Continued.*

Etta M. Griffin, Eng., Mt. Salem.
 Hattie Wilcox Holmes, Eng., Ypsilanti.
 Sara Mabel Heath, Eng., Wixom.
 Fred James Hendershot, Sci. Lat., Tecumseh.
 Alice Fremont Harper, Eng., Milan.
 N. Holland Hayden, B. S., An. Cl., Hudson.
 Maud M. Howell, Eng., Macon.
 Flora Helen Hartbeck, M. Cl., Detroit.
 Sarah Jane Keedle, Eng., Superior.
 Andrew Dwight Kennedy, Eng., Salt River.
 Nora V. Long, Sci. Lat., Vicksburg.
 Frank; Martin Lamb, Eng., Novi.
 Inez M. Ladd, Sci. Ger., Brooklyn.
 Rosa Imogene Lockwood, Eng., Port Huron.
 Claude Sheldon Larzelere, Sci. Lat., Quincy.
 Lillian LaSelle, Sci., Portland.
 Frank E. Lodeman, M. Cl., Ypsilanti.
 William N. Lister, Sci. Sh. Ger., Plainfield.
 Marie V. Lindsay, Eng., Ann Arbor.
 Lawrence Thomas Martin, Eng., Ypsilanti.
 Emma M. Moorehouse, Eng., Ypsilanti.
 Anna S. Moss, Eng., Mt. Pleasant.
 Maggie S. Monteith, Eng., Monteith.
 Sheridan Mapes, Eng., Fulton.
 Kate Fidelia McCormack, Eng., Idlewild.
 Frank A. Norton, Sci. Ger. Ypsilanti.
 Efford Ray Nethercott, Eng., Albion.
 Libbie Grace Otis, Eng., Bloomer Township.
 Luna M. Plowman, Eng., Watertown.
 John Petrie, Eng., St. Johns.
 Minnie Pattison, Eng. with Sh. Ger., Ypsilanti.
 Marshall Jewell Pease, Sp. Mus., Ypsilanti.
 Milton Ray Parmelee, Sci. Sh. Lat., Iron Mountain.

Marion Pierce, Eng., Newton.
 Nellie Quirk, Lit., Belleville.
 Emily Roth, Eng., Almont.
 Ida Melissa Robbins, Eng. with Sh. Ger., Delta.
 Arthur Churchill Roberts, An. Cl., Plainwell.
 Mary Roth, Eng., Almont.
 John W. Stephens, Lat. Ger., Romeo.
 Rena Elvira Stoddard, Eng., Concord.
 Peter M. Stegenga, Sci. Ger., New Holland.
 Marcia Stuart, M. Cl., Wyman.
 Alberta Martesia Stevenson, Eng., Morenci.
 Kittle C. Simon, Lit., Almont.
 Melvin Brooks Severance, Lit., Marston, Ont.
 Lois A. Southwick, Eng., Martin.
 Myron Clyde Skinner, Eng., Warren.
 Clara Schlichting, Eng. with Ger., Lake Linden.
 Robert C. Stackable, Sci. Lat., Pinckney.
 Perry F. Trowbridge, Lat. Ger. Sci., Centreville.
 Rachel Tate, Lit., Berrien Springs.
 Seth B. Terry, Eng., Duffield.
 Delphine Margaret Valnave, Eng., Hand Station.
 Estelle S. Witt, Lit., Almont.
 Clara Waldron, Eng., Tecumseh.
 James Henry Wallace, Eng., Fowlerville.
 Gertrude Elstner Woodard, Sp. Mus., Ypsilanti.
 Eltha Cynthia Wright, Lat. Ger., So. Grand Blanc.
 Lavanche Fidelia Walker, Eng., Dansville.
 May Louise White, Eng., Sturgis.
 Lulu Waldo, Eng., Wayland.
 Flora Wilber, Sci. Ger., Ypsilanti.
 Harry Sutton Waterbury, An. Cl., Highland.
 Mary Rorison Yost, Lit., Big Rapids.

COURSES OF STUDY.

These are reported in full in Schedule A herewith submitted. An analysis of them reveals the fact that the tendency of the Normal School is at present towards specialization in study. There is at this time no four years' course that has not the nature of a special course, either in languages or literature, or science and mathematics. Strict adherence to the tabulated courses compels an unsymmetrical training. We offer a choice between the kinds of specialization, but with the present constitution of our courses we compel it in one direction or another. This ought to be corrected, and to this end I recommend that the courses be arranged with certain necessary Normal School work common to all the courses required; and that there be freedom of choice in enough complimentary studies to fill up the requirements for a four years' course. If any student desires to do so sensible a thing as to balance his acquirements somewhat equally between literature and mathematics and science, he should at least have opportunity to do so.

TEXT-BOOKS.

The grant of text-books free upon the deposit of a moderate sum to be returned when the books are brought back in good order has been highly appreciated by our students, who are mainly hard working young men and women, earning their own way to an education. The money thus saved to them means just so much more time at school, and so much more earnestly desired opportunity for study and improvement. The books at present in use in the school are named in Schedule B, appended to this report.

THE DEMAND FOR TRAINED TEACHERS.

This demand is now far in excess of our ability to meet it. Every week there are applications for teachers that we are obliged to answer with the statement that our list of available candidates is exhausted. This is an encouraging state of affairs and shows advancing appreciation of the Normal School and its work. Formerly requests were largely for grammar grade and high school instructors, but, as our training school with its opportunities for kindergarten instruction and practice progresses in excellence, we find that the calls for good and thoroughly trained primary teachers become more frequent and pressing.

THE TRAINING SCHOOL.

This most important department of the Normal School is now well equipped as to skillful teachers, ample room and good means of illustration. It is now doing good work and meeting all reasonable expectations. I hope the system of free text-books will be speedily extended to this department. Its greatest need just now is an extension of the time which senior students in the Normal School devote to practice teaching, and this is needed rather by the Normal school proper than by the training department, though it would be beneficial to both. Not only should the time be extended, but it should be concentrated into a single half year, instead of being scattered through a whole year as it is at present. Such a change will allow a far more advantageous sectioning of the classes of pupil teachers, and make changes in the charge of training school rooms and classes less frequent.

ADMISSION OF HIGH SCHOOL GRADUATES.

If ever the Normal School is to stand upon the ground that exactly belongs to it, it must, in large degree, remand the academic work necessary to the preparation of teachers for their duties, to the high schools, where it rightfully belongs. Then it should concern itself mainly with the professional training of the young men and women who have already received the larger part of their academic instruction. This professional training may rightfully include not only methods, history of education, psychology, and practice teaching under supervision and criticism, but also academic study more advanced than the high schools can offer, and sharp and crucial reviews of the common branches. For the remainder of the academic studies, the Normal School ought to trust the high schools, at least until they show themselves unworthy to be trusted, and to this end there should be liberal dealing

with them in the matter of credits upon their certificates of standings. Twenty normal schools could not do all the required academic teaching for the instructors required by the State. I am sure that our policy should lie in the direction of encouraging high schools to do the work that of right is theirs to do. We do not so encourage them when we insist upon doing a considerable part of their work over after them. This matter is respectfully commended to your attention.

ADVANCED COURSES OF STUDY.

In my report for the year 1887-8 may be found the following expression of opinion in regard to advanced courses of study, which here we submit for your consideration, adding only that preparation to teach in the high schools of Michigan ought to cover considerably more than the contents of our four-year courses. Superintendents of city and village schools, and principals of high schools, should be equipped with a fairly wide margin of scholarship beyond actual requirements of the courses of study pursued in the institutions which they have in charge. No one can teach intelligently and progressively unless his preparation has covered a course considerably in excess of anything that he may be called upon to teach. Two years of work added to our present longer courses would give none too high a degree of culture for the positions named above.

"The true function of our Normal School is to equip teachers for all grades of schools including not only primary and grammar school-, but high schools, and the superintendence of city and village schools as well. Many of our students who graduate in our longer courses would gladly return to us for further study and preparation if opportunity were offered. The Normal School ought to cover the ground marked out above so thoroughly that there could be no question concerning the competency of its graduates for the lines of educational activity thus outlined. To this end, I would be glad to see provision made for optional courses in advanced study—courses which would justly lead to a literary, a pedagogical degree. * * * * * Any one of our present four years' courses could be so extended with very small additional cost in operating the school.

"If to any one of our four years' courses should be added such suitable topics of study as could be selected from the others which the school already offers and provides, instruction in little more would need to be done. Any additional instruction required on this account would be nearly if not quite balanced by the practice teaching in higher grades which such advanced pupils would willingly render. I respectfully commend this matter to your further consideration."

I think I may truly say that the year now reported upon has been a prosperous one in which good progress has been made and good and lasting results secured.

Yours, very respectfully,

JOHN M. B. SILL,
Principal.

SCHEDULE A.

COURSES OF INSTRUCTION.

SCIENTIFIC COURSE.*First Year—First Term.*

1. Vocal Music. 2. Elementary Drawing. 3. Geography, 10 weeks; Penmanship, 10 weeks. 4. Algebra.

Second Term.

1. Arithmetic, 10 weeks; Grammar, 10 weeks. 2. Reading and Orthoëpy. 3. Algebra. 4. Civil Government, 10 weeks; Elementary Professional Instruction, 10 weeks.

Second Year—First Term.

1. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks. 2. Rhetoric. 3. Geometry (plane). 4. Advanced Drawing.

Second Term.

1. United States History. 2. Botany. 3. English Literature. 4. Geometry (solid).

Third Year—First Term.

1. Zoölogy, 10 weeks; Comp. Zoölogy, 10 weeks. 2. General History. 3. Elementary Physics. 4. Psychology.

Second Term.

1. Higher Algebra. 2. Advanced Physics. 3. Professional Training in Common Branches. 4. Psychology Applied to Teaching.

Fourth Year—First Term.

1. Chemistry. 2. Physical Technics, 10 weeks; Political Science, 10 weeks. 3. Geology. 4. Practice Teaching Essays.

Second Term.

1. Chemistry (Advanced), 10 weeks; Astronomy, 10 weeks. 2. Trigonometry, 10 weeks; Surveying, 10 weeks. 3. Practice Teaching. 4. Training in Physical Science, 10 weeks; History of Education, 10 weeks.

LITERARY COURSE.

First Year—First Term.

1. Vocal Music. 2. Reading and Orthoëpy. 3. Civil Government, 10 weeks; Elementary Professional Instruction, 10 weeks. 4. Algebra.

PUBLIC INSTRUCTION.

Second Term.

1. Arithmetic, 10 weeks; Grammar, 10 weeks. 2. Elementary Drawing. 3. Penmanship, 10 weeks; Geography, 10 weeks.

Second Year—First Term.

1. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks. 2. United States History. 3. Geometry (plane). 4. Rhetoric.

Second Term.

1. General History. 2. Botany. 3. English Literature. 4. Geometry (solid).

Third Year—First Term.

1. Zoölogy, 10 weeks; Comp. Zoölogy, 10 weeks. 2. Advanced English Literature, 10 weeks; Political Science, 10 weeks. 3. Elementary Physics. 4. Psychology.

Second Term.

1. American Literature. 2. Grecian and Roman History. 3. Professional Training in Common Branches. 4. Psychology Applied to Teaching.

Fourth Year—First Term.

1. Chemistry. 2. English; Constitutional History. 3. English Masterpieces. 4. Practice Teaching; Essays.

Second Term.

1. Constitutional History of United States. 2. Study of Masterpieces. 3. Practice Teaching. 4. Training in Physical Science, 10 weeks; History of Education, 10 weeks; Essays.

ANCIENT CLASSICAL COURSE.

First Year—First Term.

1. Arithmetic, 10 weeks; Grammar, 10 weeks. 2. Latin. 3. Geography, 10 weeks; Penmanship, 10 weeks. 4. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks.

Second Term.

1. United States History. 2. Latin. 3. Algebra. 4. Civil Government, 10 weeks; Reading and Orthöpy, 10 weeks.

Second Year—First Term.

1. Algebra. 2. Rhetoric. 3. Elementary Physics. 4. Latin.

Second Term.

1. Geometry (plane). 2. Vocal Music. 3. Grecian and Roman History. 4. Latin.

Third Year—First Term.

1. Geometry (solid). 2. Latin. 3. Greek. 4. Psychology.

Second Term.

1. Latin. 2. Greek. 3. Professional Training in Common Branches. 4. Psychology Applied to Teaching.

Fourth Year—First Term.

1. Chemistry. 2. Latin. 3. Greek. 4. Practice Teaching; Essays.

Second Term.

1. Latin. 2. Greek. 3. Practice Teaching. 4. Training in Physical Science, 10 weeks; History of Education, 10 weeks.

MODERN CLASSICAL COURSE.

First Year—First Term.

1. Arithmetic, 10 weeks; Grammar, 10 weeks. 2. German. 3. Geography, 10 weeks; Penmanship, 10 weeks. 4. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks.

Second Term.

1. United States History. 2. German. 3. Algebra. 4. Civil Government, 10 weeks; Reading and Orthoëpy, 10 weeks.

Second Year—First Term.

1. Algebra. 2. Rhetoric. 3. Elementary Physics. 4. German.

Second Term.

1. Geometry. 2. Vocal Music. 3. German. 4. French.

Third Year—First Term.

1. Geometry (solid). 2. German. 3. French. 4. Psychology.

Second Term.

1. General History. 2. French. 3. Professional Training in Common Branches. 4. Psychology Applied to Teaching.

Fourth Year—First Term.

1. Chemistry. 2. German. 3. French. 4. Practice Teaching; Essays.

Second Term.

1. German. 2. French. 3. Practice Teaching. 4. Training in Physical Science, 10 weeks; History of Education, 10 weeks; Essays.

LATIN AND GERMAN.

First Year—First Term.

1. Arithmetic, 10 weeks; Grammar, 10 weeks. 2. Latin. 3. Geography, 10 weeks; Penmanship, 10 weeks. 4. German.

PUBLIC INSTRUCTION.

Second Term.

1. Civil Government, 10 weeks; Reading and Orthoëpy, 10 weeks. 2. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks. 3. Latin. 4. German.

Second Year—First Term.

1. Algebra. 2. Latin. 3. Rhetoric. 4. German.

Second Term.

1. Algebra. 2. Grecian and Roman History. 3. Latin. 4. German.

Third Year—First Term.

1. Geometry. 2. German. 3. Latin. 4. Psychology.

Second Term.

1. Latin. 2. United States History. 3. Professional Training in Common Branches; Psychology applied to Teaching.

Fourth Year—First Term.

1. Elementary Physics. 2. Latin. 3. German. 4. Practice Teaching; Essays.

Second Term.

1. Latin. 2. German. 3. Practice Teaching. 4. Training in Physical Science, 10 weeks; History of Education, 10 weeks; Essays.

SCIENTIFIC LATIN COURSE.

First Year—First Term.

1. Arithmetic, 10 weeks; Grammar, 10 weeks. 2. Elementary Drawing. 3. Geography, 10 weeks; Penmanship, 10 weeks. 4. Latin.

Second Term.

1. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks. 2. Latin. 3. Algebra. 4. Civil Government, 10 weeks; Reading and Orthoëpy, 10 weeks.

Second Year—First Term.

1. Algebra. 2. United States History. 3. Vocal Music. 4. Latin.

Second Term.

1. Rhetoric. 2. Botany. 3. Geometry (plane). 4. Latin.

Third Year—First Term.

1. Geometry (solid). 2. Latin. 3. Elementary Physics. 4. Psychology.

Second Term.

1. Latin. 2. Grecian and Roman History. 3. Professional Training in Common Branches. 4. Psychology applied to Teaching.

Fourth Year—First Term.

1. Chemistry. 2. Latin. 3. Geology. 4. Practice Teaching; Essays.

Second Term.

1. Trigonometry, 10 weeks; Astronomy, 10 weeks. 2. Latin. 3. Practice Teaching. 4. Training in Physical Science, 10 weeks; History of Education, 10 weeks; Essays.

SCIENTIFIC GERMAN COURSE.

First Year—First Term.

1. Arithmetic, 10 weeks; Grammar, 10 weeks. 2. Elementary Drawing. 3. Geography, 10 weeks; Penmanship, 10 weeks. 4. German.

Second Term.

1. Physiology, 15 weeks; Narcotics, 5 weeks. 2. German. 3. Algebra. 4. Civil Government, 10 weeks; Reading and Orthöpy, 10 weeks.

Second Year—First Term.

1. Algebra. 2. United States History. 3. Vocal Music. 4. German.

Second Term.

1. Rhetoric. 2. Botany. 3. Geometry. 4. German.

Third Year—First Term.

1. Geometry (solid). 2. German. 3. Elementary Physics. 4. Psychology.

Second Term.

1. General History. 2. English Literature. 3. Professional Training in Common Branches. 4. Psychology applied to Teaching.

Fourth Year—First Term.

1. Chemistry. 2. German. 3. Geology. 4. Practice Teaching; Essays.

Second Term.

1. Trigonometry, 10 weeks; Astronomy, 10 weeks. 2. German. 3. Practice Teaching. 4. Training in Physical Science, 10 weeks; History of Education, 10 weeks; Essays.

SCIENTIFIC COURSE WITH GREEK.

First Year—First Term.

1. Vocal Music. 2. Elementary Drawing. 3. Geography, 10 weeks; Penmanship, 10 weeks. 4. Algebra.

PUBLIC INSTRUCTION.

Second Term.

1. Arithmetic, 10 weeks; Grammar, 10 weeks.
2. Reading and Orthoëpy.
3. Algebra.
4. Civil Government, 10 weeks; Elementary Professional Instruction, 10 weeks.

Second Year—First Term.

1. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks.
2. Rhetoric.
3. Geometry (plane).
4. Advanced Drawing.

Second Term.

1. United States History.
2. Botany.
3. English Literature.
4. Geometry (solid).

Third Year—First Term.

1. Greek.
2. General History.
3. Elementary Physics.
4. Psychology.

Second Term.

1. Greek.
2. Advanced Physics.
3. Professional Training in Common Branches.
4. Psychology applied to Teaching.

Fourth Year—First Term.

1. Chemistry.
2. Greek.
3. Geology.
4. Practice Teaching; Essays.

Second Term.

1. Advanced Chemistry, 10 weeks; Astronomy, 10 weeks.
2. Greek.
3. Practice Teaching.
4. Training in Physical Science, 10 weeks; History of Education, 10 weeks; Essays.

ENGLISH COURSE.

First Year—First Term.

1. Arithmetic, 10 weeks; Grammar, 10 weeks.
2. Reading and Orthoëpy.
3. Geography, 10 weeks; Penmanship, 10 weeks.
4. Elementary Drawing.

Second Term.

1. Algebra.
2. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks.
3. Vocal Music.
4. Botany.

Second Year—First Term.

1. Algebra.
2. Civil Government, 10 weeks; Elementary Professional Instruction, 10 weeks.
3. Rhetoric.
4. United States History.

Second Term.

1. Geometry.
2. Elementary Physics.
3. Psychology.
4. Book-keeping, 10 weeks; Professional Training in Reading; Grammar.

NOTE.—German or French may take the place of Greek in the foregoing Course, in which case it is called "Scientific with Shorter German (or French)."

Third Year—First Term.

1. Chemistry. 2. Professional Training in Arithmetic; Geography, 10 weeks; Political Science, 10 weeks. 3. Psychology Applied to Teaching. 4. Practice Teaching; Essays.

Second Term.

1. English Literature. 2. General History. 3. Practical Teaching. 4. Training in Physical Science, 10 weeks; History of Education, 10 weeks; Essays.

NOTE.—To this Course may be added, without substitution, the full Course in Latin, Greek, French, or German. The Course, so enlarged, is called "English with Latin (Greek, French, or German)." Or two years of Latin, French, or German may be added, the Course, so enlarged, being called "English with Shorter Latin (French or German)." Or, 160 weeks of English studies from other Courses may be added, and the Course so extended is called "English with an added year." In all the foregoing cases, the graduate is entitled to a certificate good for life, if the added studies amount to 160 weeks of satisfactory work.

SPECIAL COURSE WITH MUSIC.

First Year—First Term.

1. Elementary Vocal Music, with Methods. 2. Voice Culture. 3. Grammar, 10 weeks; Arithmetic, 10 weeks. 4. Algebra.

Second Term.

1. Advanced Vocal Music, with Methods. 2. Voice Culture. 3. Physiology and Hygiene, or a language. 4. Algebra.

Second Year—First Term.

1. Harmony. 2. United States History. 3. Elementary Physics or a language. 4. Voice Culture.

Second Term.

1. Harmony. 2. Psychology. 3. Rhetoric, or a Language. 4. Voice Culture.

Third Year—First Term.

1. Musical Composition. 2. Practice Teaching, Conducting or Accompanying. 3. Geometry (plane), or a Language. 4. Solo Singing; Essays.

Second Term.

1. Literature of Music. 2. English Literature, or a Language. 3. Practice Teaching, Conducting or Accompanying. 4. Solo Singing; Essays.

NOTE.—In addition to the studies named above, the following are required of graduates in this course: Geography, Reading and Orthography, Civil Government and Penmanship. In this course, studies elected from other Courses and requiring equal time and preparation, will be accepted in place of any studies named above, except third grade certificate studies and such as pertain to music.

SCHEDULE B.

TEXT AND REFERENCE BOOKS.

Psychology—*Putnam*.
 History of Education—*Compayré, Payne*.
 Arithmetic (Method)—*Bellows, Milne*.
 Algebra—*Bellows*.
 Geometry—*Bellows*.
 Trigonometry and Surveying—*Bellows*.
 Grammar—*Reed and Kellogg*.
 Rhetoric—*D. J. Hill*.
 English Literature—*Stopford Brooks*.
 American Literature—*Royse*.
 Orthodoxy—*Salisbury*.
 Reader—*Fulton & Trueblood*.
 Geography, Physical, Atlas—*Bryce*.
 United States History—*Doyle, Johnston*.
 General History—*Myers, Labberton*.
 Book-keeping—*Wooley*.
 Civil Government—*Cocker, Story*.
 Political Science—*Newcomb, Gregory*.
 Astronomy—*Newcomb*.
 Physics—*Gage, Anthony, Strong*.
 Chemistry—*Jones, Remsen*.
 Botany—*Bessey, Gray, Wood*.
 Physiology and Hygiene—*Walker or Martin*.
 Zoology—*Packard, Orton*.
 Geology—*Dana*.

French :

Macmillan's Course I, II, III.
 Mme. de Girardin—*La Joie fait Peur*.
 Scribe and Legouvé—*La Bataille de Dames*.
 Halévy—*L'Abbé Constantin*.
 Sandeau—*Mlle. de la Seiglière*.
 George Sand—*La Mare au Diable*.
 Lacombe—*Petite Histoire au Peuple Français*.
 Corneille—*Le Cid*.
 Molière—*Les Femmes Savantes*.
 Racine—*Esther*.
 Hugo—*Hernani*.
 Legouvé—*La Lecture en Action*.
 Sainte Beuve—*Causeries*.
 Some French Work on Education.

German :

Macmillan, Brandt's Grammar, Lodeman's Manual.
Goethe's Hermann and Dorothea, Egmont.
Lessing's Minna von Barnhelm, Nathan der Weise.
Gutzkow's Zopf und Schwert.
Schiller's Wilhelm Tell.
Heine's Prosa or Goethe's Prosa.
 Prose Composition (Buckhelm).
 Written Exercises and Conversation.
 Lectures on German Literature and History.
 Some German Work on Education.

Latin :

Jones—1st Lessons, Latin Prose.
D'Ooge—Colloquia Latina.
Harkness—Grammar.
Allen & Greenough—Cæsar, Cicero.
Lincoln—Ovid, Metamorphoses.
Frieze—Vergil.
Tomlinson—Sight Reading.
Daricell—Prose Composition.

Greek :

Boise—1st Lessons, Xenophon, Anabasis.
Hadley & Allen—Greek Grammar.
Moss—1st Greek Reader.
Jones—Greek Prose.
Keep—Homer, Iliad.

Music :

Pease's Singing Book.
Pease & Hewitt—Harmony Manual.
Emery—Elements of Harmony.
Scharfe—Development of the Voice.

TEXT-BOOKS USED IN THE TRAINING SCHOOL.

Arithmetic—Bellows & Olney.
Language—Swinton, Reed and Kellogg.
Reading—Modern School, Appleton, Barnes, McGuffey.
Geography—Appleton, Our World.
United States History—Higginson, Swinton.
Penmanship—Spencerian.
Dictionary—Webster.
Physiology and Hygiene—Kellogg, Smith.
Music—Pease, Tufts and Holt.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction :

SIR—The committee of visitors to the State Normal School beg leave to submit the following report:

They have endeavored to give close attention to the every day class-room work. All were present at the recitations and other exercises June 12, 1889. Each member of the committee has had previous relations to this admirable school, and hence some intimate knowledge of its character and aims. They observe with satisfaction many signs of enlargement and progress. All enlightened educators recognize the value of normal instruction. The teacher, not less than the physician or lawyer, must have special training to qualify him for his work. Our State Normal School holds a very important relation to the public school system of this commonwealth. Nor is its influence restricted to our own State. It justly takes position in the front rank of professional schools in this country. We believe that it has vindicated the policy of our legislature to build up one well equipped, highly efficient training school for the whole State, rather than establish two or more institutions of inferior character. Our Normal School has had a growth in some degree corresponding to the growth of the State. In the academic department, which is undoubtedly essential to its highest efficiency, the range of topics is being gradually extended, and examinations are more rigid and thorough.

The work in the practice school is wisely directed, and, by means of it, students obtain some practical experience in the best and most enlightened methods. We observed in each class-room a tension of interest and enthusiasm on the part of instructor and pupil which was very gratifying.

Respectfully submitted,

THEO. NELSON,
C. T. GRAWN,
MRS. M. FAIRBANK.
Board of Visitors.

QUESTIONS USED AT THE EXAMINATION FOR STATE TEACHERS' CERTIFICATES.

HELD AT LANSING, DECEMBER, 1889.

ARITHMETIC.

1. Explain your method of teaching primary classes in numbers.
2. Give the analysis of the following : A grocer sells sugar at $3\frac{1}{4}$ cents a pound more than it cost him, and makes 25 per cent. profit, what was the selling price?
3. State your method of teaching decimal fractions, and give the reasons for the rule of pointing off in multiplication and division.
4. A's income is 16 per cent. of his capital; he is taxed $2\frac{1}{4}$ per cent. of his income and pays \$26.04; what is his capital?
5. With advanced pupils, in what order should a new topic, *e. g.*, percentage, be studied? Give reason for your answer. Describe the best method of teaching the tables in compound numbers and give reasons why you consider the method the best.
6. What principal must be loaned January 1 at 9 per cent. to be repaid by 5 installments of \$200 each, payable on the first day of each of the succeeding 5 months?
7. What is the length of a minute hand whose extreme point moves 4 inches in 3 min. 28 sec.?
8. Bought a check on a suspended bank at 55 per cent.; exchanged it for railroad bonds at 60 per cent. which bear 7 per cent. interest; what rate of interest do I receive on the amount of money invested?
9. A. borrowed a sum at 6 per cent. payable semi-annually and lent it at 12 per cent. payable quarterly, and clears \$2,450.85 a year; what is the sum?
10. Extract the cube root of a quantity and explain the process in full.

GEOMETRY.

1. Draw a line, a right angle, an equilateral triangle, a circle, a cube, a parallelogram, a chord, an arc, and a tangent.
2. *Theorem* : When one straight line crosses another straight line the verticle angles are equal.
3. *Theorem* : If two parallel straight lines be cut by a third straight line the alternate interior angles are equal.
4. *Theorem* : Two triangles are equal in all respects when a side and two adjacent angles of one are equal respectively to a side and two adjacent angles of the other.

5. *Theorem* : The diameter of a circle is greater than any other chord.
6. *Theorem* : Any triangular pyramid is one-third of the triangular prism having the same base and equal altitude.
7. If the hypotenuse of a right-angled triangle is 35, and the sides of its inscribed square 12, what are its sides?
8. Two parallel chords in a circle were measured and found to be 8 feet each, and their distance asunder was 6 feet; what was the radius of the circle?
9. *Problem* : To inscribe a circle within a given triangle.
10. *Theorem* : The sum of the three angles of any special triangle is greater than two right angles, and less than six right angles.

ENGLISH GRAMMAR.

1. Give all the grammatical inflections and show their use.
2. Name and illustrate all the forms of conjugation. Define and explain the use of voice, and how distinguished.
3. No funeral train is *sweeping past*; yet, on the stream and wood,
With melancholy light, the moonbeams rest
Like a pale, spotless shroud; the air is *stirred*
As by a mourner's sigh; and, on yon cloud
That floats so still, and placidly through heaven,
The spirits of the season seem to stand—
* * * * * —and breathe
In mournful cadences that come abroad
Like the far wind-harp's wild and touching wail,
A melancholy dirge o'er the dead year,
Gone from the earth forever.
- (a) Resolve the above into propositions and classify them according to rank and use.
- (b) Parse in full the italicized words.
4. Give and illustrate the various uses of "what."
5. There are frequent examples of persons, when just about to suffer death, taking a passionate farewell of the sun, moon, and stars.
Analyze; parse italicized words.
6. Correct the following, if incorrect, and give the reasons: (a) Who do you think me to be? (b) Who was it that was thought to be me? (c) I am not sure but what he is right.
7. Give and illustrate the uses of the infinitive. When is "to" omitted.
8. Give the past tense and past participle of lie, weave, burst, wring, drink, buy, flee. Form the future perfect tense of do; the past perfect potential of go.
9. (a) Compare near, little, honorable. (b) Form the possessive singular and plural of princess, brother-in-law, sheep, lady, monkey.
10. Correct the following, and give reasons for the changes: (a) Let each pupil see to it that they keep their own seats. (b) This is a phenomena common to many diseases. (c) Which of the two houses is the largest? (d) The man don't do his duty.

LITERATURE.

1. What do you understand by the term "style" as applied to literary composition? In what was the "style," of Edgar Allen Poe peculiar? What characteristics marked the writings of Thomas Carlyle?

2. What do you understand by the term "realism" as applied to fiction? Name prominent members of the so-called "realistic school."
3. Name the most noted poets, essayists, and dramatic writers of the "Elizabethan Age?"
4. What is the relation of the literature of a country to its social and intellectual progress?
5. What recent additions to American literature have attracted national notice? Give the assumed purpose or peculiarities of such as you name.
6. What can you say of the poetical writings of Robert Browning?
7. What important change in the political and social conditions of a section of the United States was in part effected through the writings of an American poet? Give the period and character of his writings, and name the poet.
8. What is meant by the term "classical" as applied to literature? From whence did it originate, and to whom or what might it now refer?
9. By whom is the argument aggressively advanced that Shakespeare was not the author of the plays and poems accredited to him? Upon what assumed proofs or facts are the arguments based? What do you think of them?
10. What do you know of the "Junius Letters." When and where were they published, and what was their character and purpose?

RHETORIC.

1. Define Taste and show how it may be cultivated.
2. Define the term Diction. What are the essentials of good diction?
3. Name three essentials of good style in writing.
4. Define allegory and name one great example in prose and one in poetry.
5. Name the figures of speech in each of the following:
 - (a) He bridled his tongue.
 - (b) Milton! England hath need of thee.
 - (c) No doubt, wisdom will die with you.
 - (d) There were twenty sail.
 - (e) We find it in Shakespeare.
6. Explain the difference between essay and oration.
7. Outline (a) an essay upon "The School System of Michigan," (b) an oration upon "Popular Education."
8. Write a brief, properly arranged business letter to John Doe.

GEOGRAPHY.

1. What place upon the earth's surface is south from every other place?
2. How many degrees from the Equator to the Arctic Circle?
3. What two rivers receive all the waters from all the streams in Iowa?
4. Trace the water communication between Chicago and Pittsburg.
5. Describe the Welland Canal.
6. Through what waters would you pass in sailing from St. Paul to Portland, Oregon.
7. Name the principal grain producing countries of the world and give reasons why these countries produce grain.
8. What loading would a merchant steamer take from the West Indies to New York? What from New York to Liverpool? What from Liverpool to Cairo? What from Cairo to Tokio? Describe the route taken.

9. Describe the two principal watersheds of the United States.
10. Into what races is the population of the earth divided? Locate each.

UNITED STATES HISTORY.

1. What had been the official connection of Jefferson Davis with the United States Government previous to the rebellion?
2. Give date of the admission of Michigan into the Union as a State, and name of the first Governor, and the first representatives in the upper and lower houses of Congress?
3. When was the constitution of the United States adopted? How many amendments have been made thereto?
4. What States were represented in the Union when Washington became President? Give the order of admission of the States since added.
5. When and where was the constitution of the seceding or "Confederate States" adopted. What States were represented in the convention that adopted it?
6. By what political organization and for what purpose was the Hartford Convention of 1814 held?
7. Give an outline sketch of the terms and purposes of the Reconstruction Acts of 1867. What States were included in the provisions of these acts and through what means was the Reconstruction Period brought to an end?
8. Give the avowed purpose and membership character of the following organizations: Grand Army of the Republic, Loyal Legion, Patrons of Husbandry, Knights of Labor.
9. What political exigency made necessary the so-called "Nullification Proclamation?" What laws of the federal government were in danger of being annulled?
10. For what purpose was the Civil Service Commission created? What are the powers and duties of the Inter-State Commerce Commission?

GENERAL HISTORY.

1. What is given in history and tradition as to the origin of the Latin races and language?
2. Give a brief sketch of the causes and results of the war between Algiers and the United States.
3. Who were the Encyclopedists? What was the character of their productions? What important historical event is said to have been brought on or hastened through the agitation they aroused?
4. What countries were allied for the prosecution of the Crimean war? What was the purpose of the war?
5. Give a short sketch of the Crusade of 1096, including its origin and accomplishment.
6. What is meant by the "Feudal System?"
7. What form of government prevails in each of the several political divisions of South America?
8. When and by whom was the doctrine of Papal Infallibility proclaimed? Give an explanation of the doctrine.
9. In what countries does the Religion of Buddha prevail? What is the form and character of the religion?

10. Give a short sketch of some important facts connected with the battle of Waterloo; also of the battle of Gettysburg.

CIVIL GOVERNMENT.

1. Through what legal procedure can an amendment to the constitution of the State of Michigan be made? Through what procedure can an amendment to the constitution of the United States be secured?

2. Name the several departments of the Cabinet of the President of the United States, and state the particular duties of the head of each department.

3. What legislative powers are possessed in Michigan by the County Board of Supervisors?

4. Name the elective officers of the township, and state the duties of each officer?

5. What officers constitute the State Board of Auditors, and what are the duties of the Board?

6. What powers and duties has the general government of the United States within a State?

7. What officers of the State of Michigan are elected by vote of all the voters of the State?

8. When is a Territory eligible to recognition as a State in the Union, and through what procedure does it become a State?

9. What are the possible advantages and benefits of a protective tariff? What the possible disadvantages and injurious results?

10. Give the order of succession to the office of President of the United States in case of successive vacancies other than by expiration of term.

THEORY AND ART.

1. Give your plan of the organization of your school.

2. What are the objects of punishment? What are proper punishments? What are improper punishments?

3. What is your method of awakening a spirit of investigation among your pupils?

4. Has the teacher the right to determine what studies the pupils shall pursue?

5. Do you think that kindergarten work can be used successfully in our graded schools?

6. When and how do you prepare for conducting your recitations?

7. Describe the personal habits of a model teacher.

8. Should pupils be kept after school hours for any purpose whatever?

9. Name and describe the faculties of the mind in the order of their development.

10. How can you teach morals and manners? Is the teacher personally responsible for the good behavior of his pupils?

PHYSIOLOGY AND HYGIENE.

1. Give a brief general description of the bony system.

2. (a) Describe muscular tissue. What are the functions of the muscular system?

3. What are the purposes of food? (b) Classify the foods. Write the effect of the digestive fluids upon each class.

4. What are the general hygiene laws of the digestive system?

5. Outline the (a) organs, and (b) purposes of respiration, and (c) the purposes and some simple method of ventilation.

6. Outline as for the use of a class the effects of alcohol upon the human system.
7. With the aid of a diagram, explain the structure of the eye and show how vision is produced.
8. Write a brief general description of the nervous system, including its functions.

PHYSICS.

1. A cubical vessel, every side of which is 2 square metres, is filled with water ; what is the pressure on the bottom ? What is the pressure on each side ? Write the solution of each problem.
 2. A boat displaces 12 cubic metres of water ; what is its weight ? Prove it.
 3. A vessel holds 100 Kilogrammes of water. How much Mercury will it hold Why ?
 4. A certain force gives to a body weighing 45 Kilogrammes a velocity of 9 metres a second ; what velocity will it give to a body weighing 3 grammes ? State the law which governs the solution.
 5. Give the laws relative to the vibration of the pendulum.
 6. In a wheel and axle the circumference of the wheel is 6 metres, and that of the axle 80 centimetres ; what weight will a power of 8 grammes balance ? Why ?
 7. What is the difference between high pressure and low pressure steam engines ?
 8. Upon what does the intensity of sound depend ? Show this.
 9. What takes place when a sound wave passes obliquely into a new medium ? Explain fully and give an illustration.
 10. Explain polarization and double refraction.
 11. Explain the formation of images by lenses.
 12. What is meant by Unit of heat ? Specific heat ? Fusion ? Latent heat ? Coefficient of expansion ?
 13. What is true of the quantity and of the intensity of frictional Electricity ? Prove this.
 14. How does frictional Electricity compare with Voltaic Electricity ?
 15. How must a polarized insulated conductor be situated to become charged ?
- Answer 10 of the above questions.

CHEMISTRY.

1. What is meant by chemical change ? By solution ?
2. Name and give the atomic weights of ten elements.
3. Given 100 grammes of nitrate of lead ; how much of each of the elements which enter into its composition does it contain ? Prove your work.
4. Name the properties, uses and principal compounds of chlorine, iodine, sulphur.
5. How is aluminum produced ? What are its uses ?
6. What is steel, and how is it made ?
7. Name the forms in which carbon occurs, and state how each differs from the other ?
8. What compounds of C. and H. occur in nature, and how does each differ from the other ?
9. Define acid, alkali, salt, base, metal, metalloid, reagent, alloy.
10. How is the atomic weight of the elements determined ?

ZOOLOGY.

1. What are the fundamental differences between plants and animals?
2. Into what great Branches or Types are animals divided? Give the chief characteristics of each type.
3. How do the digestive organs of an ox differ from those of a lion? State fully.
4. Describe the head and jaws of a rodent.
5. Describe the American Woodcock, also its habits and food.
6. Name and describe the principal orders of Reptiles.
7. Describe the three most important food fishes of Michigan? Tell to what family each belongs.
8. What are the principal characteristics of the Saw-fly Family?
9. Give a description of the canker worm moth, and its larva.
10. Describe the apple-tree Borer, and its larva.

GEOLOGY.

1. Name the principal agencies now in operation, and modifying the structure of the earth's surface.
 2. What agencies operate to form submarine banks? How does each do its work?
 3. How are the heat and force accompanying Volcanic activity to be accounted for?
 4. How would you explain to a class the cause of a Vorticoose Earthquake?
 5. How are beds of bog-iron formed?
 6. Name the principal kinds of stratified rocks? From what does each kind derive its name?
 7. What is the origin of unstratified rocks? What are the principal kinds?
 8. How are metalliferous veins formed?
 9. What is the origin of mountain-chains?
 10. What was the general life-system of the silurian age?
 11. What was the Physical Geography and climate of the Coal Period?
 12. What is the origin of Petroleum and Bitumen?
 13. Into what periods is the Mesozoic Era divided? Give the Fauna of the last period.
 14. What was the Physical Geography of the early Tertiary period?
- Answer 10 of these questions.

BOTANY.

1. Describe the three great kingdoms into which the earth is divided.
2. Name and describe the parts of the flowers and give the uses of each.
3. Describe plant life.
4. Describe the fruit of the rose, the strawberry, the blackberry, the apple, the pea, and the squash.
5. What is a two-lipped flower?
6. Of what parts does an embryo consist?
7. In what ways are leaves arranged upon the stem? How in the bud?
8. Sketch six different kinds of leaves.
9. What should be the first lesson in botany to a class of beginners?
10. Name some of the most important uses of plants to man.

STATE MINING SCHOOL.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction :

DEAR SIR—In compliance with Act 99, Public Acts of 1885, the undersigned visited the Michigan Mining School, arriving there on the evening of the 15th of October. We entered at once upon the discharge of our duties, and closed our labors on the evening of the 17th.

We found matters in a somewhat chaotic condition, due in part, no doubt, to the fact that the school is not yet supplied with its entire equipment, and in part, we believe, and we say it with regret, to want of an earnest effort on the part of those having the matter in charge to push the necessary work to completion as fast as possible.

That the Director of the School—Dr. Wadsworth—is not directly culpable in the matter, we freely assert, but we cannot fully exonerate him from indirect blame. In our report made in 1888, we advised both the Board of Control and Dr. Wadsworth, that the proper interests of the School demanded his entire time, and that he ought not to assume the duties of the Geological Survey in addition to those of Director of the School.

We are convinced that the School is suffering because this advice was not heeded. From conversations had with members of the Board, we are satisfied that they have arrived at the same conclusion, and that this double work of the Director will cease with the present year.

Dr. Wadsworth's argument that it is a benefit to the School to have the Geological Survey connected with it, is, in our opinion, without force, and we feel certain that any benefits derived therefrom are greatly outweighed by the direct loss the School must sustain.

We desire, however, to state that Dr. Wadsworth as a teacher is a pronounced success, but he is doing an amount of work to get the school into order which will, if continued, break down his health.

We cannot, however, say this of all members of the faculty of the school. With two exceptions, we recommend the Board of Control to seek new teachers as soon as possible, but as they have had their attention called to this matter, we have no doubt that they will give it early attention.

For a teacher to stand leaning against the wall with his hands plunged into his pockets while conducting a recitation, or for another to deliver his lectures in a perfunctory and slovenly manner, addressing himself solely to

the memory of the student, without the least attempt to arouse the reasoning faculties of his pupils, is not the kind of work one expects to see in a Michigan school, and ought not to be tolerated for a single day.

We also call attention to certain other facts which we wish to most heartily condemn. There are about twenty-five students in the school; the teachers have but from two to three classes each per day, yet young men who are sent there at great expense by their parents are obliged to pay for tutors to aid them to bring up any study in which they chance to be deficient on entrance examination. This would be all right, perhaps, if the subordinate teachers of the school were overworked, but such is not the case. We submit that if the school ever prospers, and does not die within the next two years for want of pupils (and unless the numbers increase very soon not another dollar should be spent in maintaining it), every teacher of the School must become a zealous worker to make the School noted, not be anxious to shirk everything which he is not compelled to do. Laziness or indifference in a teacher is a crime, and the sooner some members of this faculty find that out the better. Ability cannot redeem it, nor the fact that he does, after a fashion, what is marked out for him, excuse it. We advise the Board of Control to select live teachers to help the two or three they already possess.

Certain matters pertaining to the internal work of the School, and concerning which considerable friction exists, have been taken in hand by the Board of Control and will be speedily remedied, and for this reason we leave them unnoted here.

The money appropriated for completing and equipping the School is being wisely and judiciously expended and Dr. Wadsworth is giving the Board invaluable assistance. We are of the same opinion we expressed last year, viz.: that this school can be made one of the finest in the world, but it cannot be done, unless men are chosen for instructors who are capable of aiding Dr. Wadsworth to build it up. The idea of assuming that work from the start is to be done in the same manner, and with like methods, as in the old and long established schools of the east, where all the surroundings are entirely different, and in which the students are much farther advanced in mental discipline, is, in our opinion, not tenable.

To make this school a success, there must be—to use a western phrase, “a mighty sight of hustling done, and that right away.”

There is not in the State a school which, when completed, will be so well equipped for the work it is intended to do as the Michigan Mining School; this, however, is but one element in the success of a school. Students are attracted to an institution of learning not only by the facilities afforded them for pursuing their studies, but also by the ability, earnestness and zeal of the teachers of such institution to advance them in their pursuit of knowledge.

To provide a school with an able director is not alone sufficient; every subordinate must be an earnest and intelligent worker who is willing to spend and to be spent in its service.

It would be much pleasanter for us to say none but kindly things of the faculty of the school, but the interest of the State in this school is great, and our duty is imperative.

The School is being sharply criticised by the people of Houghton and Hancock. It depends upon the action of the Board of Control whether or

not, in the near future, adverse criticism shall not be changed to deserved commendation.

We believe the Board will not hesitate to assert their authority in the premises and will remedy these evils. One evil in all our State institutions grows out of the fact that Boards of Control are too apt to delegate their authority, or, worse still, to surrender it entirely to the employés they have engaged for the institutions, which such Boards are themselves elected or appointed to control, thus surrendering to others the discharge of duties which they ought to discharge, and which their failure, so to do, works incalculable harm.

We shall look with anxiety to the immediate future of this institution. It is already being mentioned by its opponents as "Hubbell's folly." This is unjust. It is not his or anybody's folly, as yet, and it will, we are satisfied, be the fault of those to whom its destiny is committed, if it does not prove a most brilliant success.

Our criticisms might be deemed severe, were it not for the fact that Dr. Wadsworth, and presumably with the sanction of his Board, for he would hardly have taken so grave a step without its authority, has made an elaborate apology for the condition of the School in one of the newspapers of the State.

The chairman of this committee was an earnest advocate of the School from its inception. He has always predicted a great future for the School, hence it is a friend's voice which gives these warnings.

The courses of study seem well selected and arranged, and some of the work done is the best of its kind.

We have refrained from making public the names of those members of the faculty who are doing the School no good, because we think no public ends would be subserved thereby, but we have freely expressed our opinions to the Director, and through him to the Board of Control.

Respectfully yours,

S. S. BABCOCK,
B. W. JENKS,

State Board of Visitors to the Michigan Mining School.

STATE AGRICULTURAL COLLEGE.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction :

DEAR SIR—The undersigned Board of Visitors to the Agricultural College visited that institution on the 11th of June last.

An inspection of one day to an institution as large as the Agricultural College must be superficial, but we made such visits to the museum, class rooms, laboratories, farm and garden as our time would permit.

The President and faculty gave us every opportunity to see, and imparted all the information which the limited time would permit. There is evidence on every hand of liberal treatment to the college on the part of the State, and it is now an institution of which the people of the State have reason to be proud.

President Clute had only just taken his position and was in the nature of things somewhat new to the place, though, judging from the way he was taking hold, he was soon to become master of the situation.

Several of the professors have served so long and so well that their names have become synonymous of what they teach. Professors Kedzie, Cook, Johnson, Carpenter and Beal have been associated with the college so long and are known so well that any mention of their work seems unnecessary. As to the remainder of the faculty, all seemed to be performing their duties in an efficient manner and it is unnecessary to particularize. It was, however, observed that the classes which were receiving instruction from the regular professors evinced more interest than when an assistant was conducting the class exercises. We suppose this is upon the principle that people everywhere prefer to treat with the head of every business rather than a clerk or subordinate.

Several of the students in the Mechanical Department have made remarkable progress, as demonstrated by specimens of their work in both wood and iron shown us. A small steamboat, which was entirely the work of the students, attracted our attention, particularly as it would be creditable to an establishment making a specialty of such work.

The farm was found in excellent condition and all of the adjuncts including the stock, tools and buildings gave evidence of efficient and competent supervision.

The garden was seen under somewhat unfavorable conditions, as the first work for sometime past was being done the day we were there, continuous heavy rains having prevailed several days before this time. There was evidence, however, that the experimental work of the garden was being conducted in a manner which would teach valuable lessons to the students and others interested in such work.

Your Board saw very little lacking on the part of the State, unless it should be the need of better facilities for bathing.

Taken as a whole, the institution is one that is very creditable to the people of the State, to the State Board of Agriculture and the faculty, which have immediate charge of its work. There can be no doubt that it has done and will continue to do a great work in the cause of industrial education, not only for the State but the Nation.

Yours respectfully,

HENRY W. JONES,
CHAS. C. HOPKINS,
JOHN T. RICH,

Board of Visitors.

ADRIAN COLLEGE.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction.

DEAR SIR—The undersigned, having visited Adrian College in accordance with instructions, would report as follows: He found, as far as he is capable of judging, a progressive, conscientious, and capable corps of instructors and an earnest and cheerful body of students, all of whom appear to be doing good work.

Like many of her sister institutions, Adrian College is hampered by her needs in the lines of apparatus for more extended work in the sciences, and by the rather meager character of her library. The investment of a few thousands, or even hundreds of dollars here by some public spirited citizen would greatly redound to his honor, and add much to the usefulness of the institution.

The location of the buildings is especially pleasant and healthful, and on the completion of the street railway (now building) they will be easily accessible from the city and depot.

Very respectfully,

H. M. SLAUSON,
Chairman Board of Visitors.

ALBION COLLEGE.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction.

DEAR SIR—The undersigned, State visitors to Albion College for the academic year 1888-9, beg leave to submit their report.

We were fortunately all able, by previous arrangement, to make the visitation at the same time, the 26th of April, which was spent in performing the duties assigned to us.

We are happy to report that we found the College enjoying a large measure of prosperity. The attendance is large. The students are earnest, orderly and hopeful. The faculty is well organized and well united. The friends of the College are giving it a steady support. The whole tone and atmosphere of the College are good.

It is manifestly impossible from a single visit of a single day circumstantially to review the work done in the various departments of the College, but we can call attention to some features that especially attracted our attention; premising, however, that failure to notice other features implies no reflection upon them. It was impossible to make the visitation equally thorough in all departments.

One noteworthy feature is the work done in biology and chemistry. Prof. Delos Fall is an able and enthusiastic instructor, and the facilities for illustrating his subjects are such as to enable him to present them in a very effective way.

Prof. Frederick Lutz we found giving excellent instruction to large and enthusiastic classes in the modern languages.

Prof. L. M. Taylor in the Chair of History, Prof. S. D. Barr in that of Mathematics, and Professors Welch and Avann in the Chairs of Greek and Latin were doing strong work in their several specialties.

The work in Physics and Astronomy, also, deserves commendation. We were much pleased to find such good appliances for illustrating these subjects, and particularly Astronomy.

Favorable mention may also be made of the Commercial Department, conducted by Principal D. W. Springer.

The library, containing about 7,000 volumes of well selected books, is in cramped quarters, but still the books are so arranged as to be readily accessible to the students.

The College administration is skillfully conducted by President Fiske, who is also instructor in Philosophy.

The most conspicuous defect of the College is lack of buildings suitable and sufficient for its work. No visitor can fail to see that the faculty are embarrassed and impeded in their work in consequence of this lack. The public, and especially the patrons and friends of the college, should see that this want is speedily met.

Respectfully submitted,

B. A. HINSDALE,

E. W. RYAN,

J. J. BRONSON,

State Board of Visitors.

ALMA COLLEGE.

REPORT OF THE PRESIDENT.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction :

SIR—In compliance with the requirement of the statute, I beg leave to report that Alma College is in a flourishing condition in the main, with the wants and embarrassments common to all western colleges. The endeavor is to do thoroughly good work, and toward this the institution is aiming and progressing.

A preparatory and a College course of four years each, with subdivisions to accommodate special students, a normal and training department for the preparation of teachers for all grades of work in our public schools, with special advantages for kindergarten training with music and art, cover the ground of the work done. It is the aim of the trustees and faculty of the college to make it a Christian school in some emphatic sense, but in no sense narrow or sectarian. We are trying to fit young men and young women for the work of life. The library of the College has made a stride forward during the year, from a mere handful of books donated by friends, to a well selected collection of more than six thousand volumes of modern sort and abreast with the times. Beside these, the library has a large collection of valuable pamphlets. The corps of instruction, somewhat broken by changes during the passing year, is now complete, and the College will enter upon a new year better manned than ever before. As one of the family of colleges in Michigan, we are not a little proud of the educational system of the State, and it is our aim to do our part in advancing the interest of the whole people along educational lines, and to give to the young people of our commonwealth advantages equal to the best.

GEO. F. HUNTING,
President.

REPORT OF STATE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction :

DEAR SIR—The undersigned State Board of Visitors to Alma College submit the following report:

We found the College well located, with fine grounds and good buildings. The buildings are four in number, the College building, the ladies' hall, the

library and the boiler house. The front, or College building, meets the present demands quite well. Nearly all the rooms are light and comfortably furnished. The ladies' hall is well arranged and managed by the lady principal in an admirable manner. The library building, which has been finished during the year, is an ornament and very conveniently arranged for library purposes. The boiler house, in the rear, contains the boilers, which is a great improvement over the old way of placing the boilers in the basement of the main building.

The faculties of the College are live workers and greatly attached to their work. The courses of study are well arranged and in every way suited to the wants of a new College to fit young men and women for the duties of life. The regular College and preparatory departments are strong, and the teaching is done by professors of experience and scholarship.

The normal department is a distinct feature, being equipped with a teachers' training department, preparing teachers for any line of teaching from the kindergarten to the high school.

The teachers of music and art are doing excellent work in the most natural methods.

The commercial department is a commendable part of the College, as it prepares the student for actual business in any line of trade.

The form of government is new and has some excellent features. It makes the students the burden bearers of good behavior. It tends to create self respect, a love for law and order, and makes them self responsible for the general reputation of the College.

The students are honest workers, and are attending the College to get the best results. The christian spirit in the College is marked. A Y. M. C. A. and a Y. W. C. A. are maintained among the students. The students are required to attend morning exercises in the chapel and public worship on the Sabbath.

The College was wise when, in organizing, it selected some of the prominent teachers of the public schools of Michigan for professors in the College, for it has brought many students from the cities where these teachers were well known.

The College needs more apparatus for the chemical and biological laboratories, a thoroughly furnished museum, and a large increase to the library. The donation of Mr. Wright of ten thousand dollars for the library will be a great help, and one which will be appreciated by all.

J. M. BALLOU,
J. M. GELSTON,
H. S. JORDAN,

State Board of Visitors.

BATTLE CREEK COLLEGE.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,

Superintendent of Public Instruction:

DEAR SIR—We, the undersigned members of the State Board of Visitors, visited Battle Creek College in March.

The location was carefully selected, and the outlook from the buildings is very commanding. The buildings, three in number, are in good shape and present a pleasing external appearance.

The College gives four courses of study—Classical, Scientific, English, and Biblical. A primary school is also conducted as an annex to the regular work.

A culinary department is established wherein regular instruction and practice are given.

The College does its own printing and thus affords facilities for instruction in this art.

A commodious gymnasium gives needed exercise for muscular development.

The library and museum have a good beginning, and, by the addition of more material, will be of great benefit to the practical workings of the institution.

The laboratory, chemical and physical, is fairly well supplied with appliances, but the working room for the student is too meager. Present practical methods of instruction demand that the student be not so much of a listener and observer of the sayings and doings of others as that he shall be a manipulator of the entire transaction for himself.

Without intending to be faultfinding, we would say that from our observations we think the teachers are doing too much work for the pupils. The pupil uses the teacher too much as a support to lean upon, and thereby does not gain that spirit of independent thinking and logical judgment.

In proportion as the pupil depends upon himself and enters into the spirit of the work, in that same measure will he be enthusiastic.

A mathematical course should train to independent thinking rather than to imitation. Scientific instruction should lead to observation and comparison rather than to memorizing the text.

The College has a faculty of ten instructors, and an attendance of about four hundred students. The discipline is good and the moral atmosphere pure.

Respectfully,

J. W. SIMMONS,
JOSEPHINE BENHAM,
FRED GLAFKE, JR.

State Board of Visitors.

DETROIT COLLEGE.

REPORT OF THE PRESIDENT.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction:

DEAR SIR—I have the honor to submit the following report of Detroit College for the year ending June 26, 1889:

The Board of Trustees is composed of five members:

Rev. M. P. Dowling, S. J., *President.*

Rev. Hugh J. Esley, S. J., *Secretary.*

Rev. Joseph G. Zealand, S. J., *Treasurer.*

Rev. Charles Coppens, S. J.

Rev. Hugh M. Finnegan, S. J.

The Faculty was as follows:

Rev. M. P. Dowling, S. J., *President.*

Rev. Hugh J. Esley, S. J., *Vice President and Prefect of Studies.*

Rev. Joseph G. Zealand, S. J., *Chaplain.*

Rev. Charles Coppens, S. J., *Professor of Mental and Moral Philosophy, Evidences of Religion, French.*

Rev. C. J. Leib, S. J., *Professor of Natural Sciences, Higher Mathematics, and Astronomy.*

Mr. Hubert Gartland, S. J., *Professor of Chemistry, Mathematics, and Commercial Law.*

Rev. Thomas Hughes, S. J., *Rhetoric, Lecturer on English Literature.*

Rev. Jos. P. DeSmedt, S. J., *Poetry and German.*

Mr. Michael S. Stritch, S. J., *Humanities.*

Rev. John A. Gonser, S. J., *First Academic and German.*

Mr. Cornelius Shyne, S. J., *Second Academic and Elocution.*

Mr. William Mitchell, S. J., *Third Academic.*

Mr. James P. Monaghan, A. B., *Third Commercial and Intermediate Latin.*

Mr. P. J. Halley, A. B., *Fourth Commercial.*

Rev. Michael Cornely, S. J., *Preparatory Department.*

Mr. William H. Machen, *Drawing.*

Mr. Allen L. Bours, *Book-keeping.*

Mr. John M. Tice, *Penmanship.*

Mr. Gregory Freytag, *Vocal Music.*

In September, 1877, Detroit College began its existence. Since that time there has been a steady increase in the number of students. There were 84 at the end of the scholastic year 1877-78, 98 in 1879, 98 in 1880, 132 in 1881, 157 in 1882, 186 in 1883, 217 in 1884, 228 in 1885, 243 in 1886, 266 in 1887, 263 in 1888.

The College closed its twelfth session (1888-89) with an attendance of 255 students, of whom 50 were in the Scientific-Collegiate Department, 118 in the Academic Department, 50 in the Commercial Department, and 37 in the Preparatory Course.

At the Commencement Exercises, held June 26, 1889, the degree of A. B. was conferred upon ten graduates who had completed our full course; the degree of A. M. upon five others who had previously received the degree of A. B. at our College and had afterwards fulfilled all the conditions necessary for the higher honor.

For several years past it has been evident that a new building was absolutely necessary to meet the growing wants of this institution. In view of the large debt already contracted in purchasing the necessary ground, it was out of the question to think of increasing to any extent the existing financial obligations. Under these circumstances, the President thought himself justified in asking and expecting the assistance of some of the friends and patrons of the College. The result was that the difficulties which stood in the way of the project were greatly lessened by liberal promises of assistance which seemed to justify the maturing of plans for an extension of the College buildings. About \$30,000 have already been subscribed. This substantial proof of appreciation and good will is very gratifying to the Faculty. At the close of the school year, or early in August, 1889, ground will be broken and the projected improvements begun. No doubt the main part of the work will be completed in time for the opening of classes in September, 1890.

Very respectfully,

M. P. DOWLING, S. J.,
President.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,

Superintendent of Public Instruction:

SIR—The undersigned committee, appointed by you to act as a Board of Visitors to Detroit College, Detroit, Michigan, would respectfully report as follows:

On the 11th day of June last past, the Board, on invitation of the Reverend Michael P. Dowling, President of the College, paid a visit to the institution. In this visitation we were accompanied, on invitation of the Board, by Mr. F. F. Palms, a staunch friend and patron of the institution. Our reception by the reverend Faculty was most cordial, and every effort was made to place us in possession of every item of information within the objects of our visit. The institution, under the care of the Fathers of the Society of Jesus, was founded twelve years ago, and incorporated on the 27th of April, 1871, under the general laws of the State of Michigan, with power to grant such literary honors and to confer such degrees as are usually conferred by colleges and institutions of learning in this country. It is divided into two departments, denominated the Collegiate and Academic Departments respectively. In addition to these, there is also a commercial course of instruction and a school preparatory to the higher departments. There is

also a thorough course in elocution, while the cultivation of the voice for the graces of oratory is aided by a course of musical instruction. The breadth of education could not be wider extended than are the courses of prescribed study. For this reason the institution numbers among its pupils lads ranging from ten to the young man of twenty, pursuing his post-collegiate course, for which ample provision is also made.

The College had its days of small things, from which it has rapidly emerged. From the time the Rev. Hugo J. Early, with two or three devoted associates, gathered about him seventy boys, unto this day, when three hundred students gather for daily instruction under the wise direction of nineteen professors and instructors. The institution is without endowment and is sustained wholly by the term fee collected from the students, the tuition being forty dollars for a session of ten months, an extra fee being charged in cases where a special course is taken involving extra expense. The buildings of the institution comprise a number of residences converted into school uses by the enlargement of living rooms into comfortable and well-lighted class rooms. Indeed, in this latter respect it is hard to conceive a more cheerful lot of class rooms than those your committee had the pleasure of visiting. The matter of ventilation has also received careful attention, and the sanitary arrangements are such as to insure the good health of both faculty and students. Scrupulous cleanliness was apparent everywhere, and coupled with all was a silence and discipline most conducive to thought and study.

Your committee was treated to recitations in Greek and Latin, the transposition of both these languages into English by boys of an average age of less than fourteen, and the proficiency shown was a matter of both gratification and surprise to your committee. From the classes in poetry we received for examination specimens of original composition, and their perusal show efforts of unusual merit. Oratorical exhibitions also were given by the students in the presence of your committee, and it was demonstrated that the cultivation of the voice and the expression and graces of delivery and gesture were carefully taught by the instructors in charge. A class in the higher mathematics gave evidence of their proficiency in an examination where problems in trigonometry were under discussion.

Your committee was pleased to note that there is in prospect a splendid College building to take the place of the several structures now occupied. The proposed building will have a frontage of 206 feet on the north side of Jefferson avenue, adjacent to the Cathedral of St. Peter's and Paul. It will be built of stone and at a cost of not less than a hundred thousand dollars. Already, in grateful recognition of the growth and influence of the College, and its merits as an institution of learning, its benefactors are many and the contributions for the expense of erecting a new building have been munificent, seven gentlemen alone subscribing the sum of \$35,000, in \$5,000 subscriptions.

In addition to the purpose of imparting mental and intellectual instruction, there is imparted also a knowledge of those branches which serve to make complete a christian and liberal education. As the intellect is illumined and the mind trained, so does the cultivation of the tenets of morality and truth find a lodgment in the heart, and so hand in hand goes on this wise combination of religion and morality with literature and science. Strict obedience to superiors is an unalterable rule, and your committee

cannot refrain from paying a high tribute of their respect for the reverence prevailing everywhere. As the committee entered the class room, accompanied by the reverend President and his assistant, every student was upon his feet at once, and in respectful attitude awaiting the kindly request of their superior to resume their seats. Such mannerly discipline will go far towards the formation of a thorough christian character, always so closely united with dignity in manner and bearing.

Your committee desire to record a grateful acknowledgment to Rev. Michael P. Dowling, President and Rev. Hugo J. Early, Vice President, for the extension of every courtesy possible, and to congratulate them and their associate instructors on the excellent condition of the College.

Respectfully submitted,

WM. C. MAYBURY,

WM. B. MORAN,

ALEXANDER M'MILLAN,

State Board of Visitors.

DETROIT HOME AND DAY SCHOOL.

REPORT OF THE PRINCIPAL.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction.

1. A fair valuation of the real estate of the institution is about forty-five thousand dollars (\$45,000).

2. The entire income from tuition fees and boarding of pupils for the year was twenty-four thousand four hundred sixty-seven dollars and forty-five cents (\$24,467.45).

3. The number of instructors employed in all departments, fifteen (15).

4. Number of pupils in the collegiate department, eighty-two (82).

5. Number of pupils in preparatory department, seventy-three (73).

6. Number of pupils in primary department, fifty-two (52).

7. Number of pupils in kindergarten department, thirty-five (35).

8. Number taking special studies, four (4).

9. Alumnae class, twelve (12).

10. Number of resident or boarding pupils was twenty-seven (27); all others were day pupils.

EXPENSES.

Tuition in Kindergarten.....	\$25 00 per term, 5 months.
" Primary Department.....	25 00 " "
" Preparatory Department.....	40 00 " "
" Collegiate Department.....	50 00 " "
Stationery, Preparatory (with spelling).....	50 " "
" Collegiate.....	25 " "
Music.....	50 00 " "

HOME DEPARTMENT.

Board and tuition.....	\$250 00 per term, 5 months.
Washing (more than allowance).....	75 per doz.
Meals served in room.....	25 each.

COURSE OF STUDY.

The course of study extends over a period of twelve years, without including the kindergarten course.

It offers liberal and thorough training in all the elementary branches, a systematic and extended course of history, reading, and literature, and as much instruction in the ancient and modern languages, the higher mathematics and the natural sciences as is possible in so limited a time.

The classical course is arranged with reference to preparation for college.

Each pupil is carefully graded and only allowed to pass from one grade to the next higher upon reaching the approved standard.

PRIMARY COURSE.

(Completed in Four Years.)

ARITHMETIC—Mental and Written, to Factoring, *Fish*.

GEOGRAPHY—Elementary, *Appleton*.

LANGUAGE LESSONS—Exercises from Reader and Geography, *Swinton*.

READING—1. First and Second Readers, *Barnes*.

2. "Seven Little Sisters," and "Each and All," *Andrews*.

3. "The Story of Our Country," *Monroe*.

4. "The Fairy Land of Science."

5. "Young Folks' Book of Poetry, Nos. 2 and 3."

SCIENCE LESSONS—1. The Child's Body.

2. Plants.

3. Animals.

SPELLING—*Patterson*.

PENMANSHIP—*Spencerian*.

PREPARATORY COURSE.

(Completed in Four Years.)

ARITHMETIC—Mental and Written, completed, *Fish*.

GEOGRAPHY—(a) First and Second Years, *Appleton or Harper*.

(b) Fourth Year, General Review.

ENGLISH COMPOSITION—*Swinton*.

HISTORY OF THE UNITED STATES—*Higgins*.

ENGLISH HISTORY—Readings, *Yonge*.

READING—Selections of Prose and Poetry from the best English and American authors.

SPELLING AND DEFINING.

PENMANSHIP.

COLLEGIATE COURSE.

(Completed in Four Years.)

* MATHEMATICS—Algebra, Geometry, Trigonometry (elective).

* NATURAL SCIENCES—Physiology, Botany, Physics, Astronomy, Chemistry.

* FRENCH, GERMAN, LATIN, OR GREEK.

* ENGLISH—Analysis and Syntax, Rhetoric, English Literature.

* HISTORY—English, French, Roman, Grecian. In connection with each a journal is written, recording imaginary travels through the different countries, with the study of the important physical features, the most famous cities, buildings, and art treasures of each. Mythology is taken up in connection with Greek history.

* ENGLISH LITERATURE—The course of English Literature may be outlined as follows:
Second Year, Collegiate Department—The History of the English Novel.

Third Year—The Literature of the Eighteenth and first half of the Nineteenth Centuries.

* Text-books.

Fourth Year—(1) The Elizabethan Era, followed by a careful study of the life and works of the following authors: John Milton, William Shakespeare, Francis Bacon, Edmund Spenser. (2) The Early English, its history and development as illustrated in literature. Special study given to Chaucer.

Wentworth's Algebra.

Channesut's Geometry.

Olney's Trigonometry.

Loomis' Physiology, Grey's Botany.

Well's Natural Philosophy, *Lochyer's* Astronomy, *Cooley's* Chemistry.

French—*Duffet & Sauveur's* text-books.

German—*Ahn's* text-books.

Latin—*Harkness' text-books.*

Greek—*Boise's* text-books.

English Literature—*Shaw.*

Nothing of a general character to be reported, except that the school is in a prosperous condition and every year affords evidence of the increased confidence of the public. All its business interests are free from discords and embarrassments. Without endowment, the earned income fairly meets all expenses.

Respectfully submitted,
J. D. LIGGETT,
Secretary Detroit Home and Day School.

GERMAN AMERICAN SEMINARY.

REPORT OF THE PRINCIPAL.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction :

DEAR SIR—Herewith I send you the required information in regard to the German American Seminary:

1. Number of pupils, 152.
2. Pupils are between the ages of 4½ to 6 (Kindergarten), and 6 to 18 (seldom 14).
3. Number of teachers, 5.
4. Number of hours taught daily, 5½.
5. Number of the weeks in the year, 48.
6. Tuition, \$1.50 a month.
7. Books of instruction : (a) FOR THE ENGLISH BRANCHES : *Barnes' Readers, Robinson's Arithmetic, Sill's Language Lessons, Appleton's Geography.* (b) FOR THE GERMAN BRANCHES : *Reffel's Buchfuer Anfänger (Lautirmethode), Petermann's Lesebücher.*
8. BRANCHES (a) IN ENGLISH : Arithmetic, Grammar and Spelling, Geography, Reading, English Letters, etc., Translation, Penmanship, Bookkeeping. (b) IN GERMAN : *Deutsches Lesen, Geschichte, Naturgeschichte and Naturlehre, Natural Philosophy, Grammatik, Declamation, Anschauungs, Unterricht (Object Lessons), Orthography, Style, Elements of Geometry and Algebra, Singing (German and English songs).*

The studies are of an elementary nature, designed for pupils between 6 and 13 years of age.

Occupations of pupils in the Kindergarten :

Weaving, drawing, pricking, folding, sewing, perforating, etc.; giftwork, marching, singing, laying forms.

Effect : Develops and trains the powers of body and mind naturally and harmoniously.

Respectfully,

G. HERMANN,
Director G. A. S.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction :

DEAR SIR—The committee appointed by the Board of Public Instruction to visit the German-American Seminary of Detroit have the honor to present the following report :

We enclose the printed program of studies and the statement of the principal, which will give all needed information on the chief points of interest in relation to the scope of the school.

We found the building well arranged for the purpose of the institution. It is well ventilated, well lighted and provided with safe exits in case of fire.

Candor requires us to say that some of the rooms are not quite as neat as they should be, nor as tasteful as a little work would make them. But all is clean and wholesome. The objects in the museum would be more instructive and suggestive of order if more carefully arranged.

The school grows out of a tendency to furnish purely secular instruction, apart from all religious teaching. The motives and reasons for this aim we do not bring into question. The public schools are on a similar basis, the principal claims.

Pupils do not remain long in this school; only long enough to gain some mastery of the German tongue.

Noteworthy features of this school are the lecture-method of the principal and the kindergarten for the small children. The kindergarten is fairly furnished with needful objects, and the exercises are conducted in a motherly German fashion quite suitable to the end. The children sing well and are trained to work together and to act socially.

The principal uses few text-books, especially in science. He furnishes pictures and objects for pupils and explains them. In recitation he requires them to tell in their own way what has been learned. He does not look at the text-book himself and seems master of the subjects taught.

Very respectfully,

C. R. HENDENSON,
WATSON B. MILLARD,
JOHN RAIRDEN,
State Board of Visitors.

HILLSDALE COLLEGE.

REPORT OF THE PRESIDENT.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction :

SIR—There is no material change in the condition of Hillsdale College from that indicated in the last report, excepting that a literary course has been added during the year, giving us three four-year courses—Classical, Scientific and Literary. The Normal and Theological courses are unchanged.

Members of the Faculty have already begun taking half-year vacations, in a prescribed order, to be employed in study with special reference to their work in College. Facilities for instruction are also being added. The Greek, Latin, and History Departments now have a fine collection of medallions, photographs, and books of reference illustrative of the art, literature and biography of the periods covered.

A course of lectures, free to the students, has been given during the year, by various persons, on literary, moral, historical and health topics.

Physical training has received increased attention in the gymnasium, and the work there now includes a regular course of military drill.

The attendance of students has shown a gratifying increase over that of the preceding year. Good order has prevailed and we are happily unable to report any noticeable cases of discipline. No cases of serious illness have appeared among the students—another evidence of the healthfulness of southern Michigan, and of Hillsdale in particular, as a place of residence and study.

The Departments of Music and Art have been well patronized. Telegraphy, short-hand, and type-writing are taught in the Commercial Department in addition to the customary instruction in penmanship, book-keeping, and commercial law.

The degrees now conferred by the College are as follows: Bachelor of Arts on graduates from the Classical course, Bachelor of Science or Philosophy on graduates from the Scientific and Philosophical course, Bachelor of Literature on graduates from the Literary course, and Bachelor of Divinity on graduates from the full Theological course. Diplomas are received by those completing the Art and Music courses, and certificates of graduation are given to those who complete the Preparatory, Normal, and English Theological courses.

GEORGE F. MOSHER,
President.

HOPE COLLEGE.

REPORT OF THE COUNCIL.

To the General Synod of the Reformed Church in America:

The Council of Hope College respectfully presents its Twenty-third Annual Report to the General Synod, as follows:

I.—COUNCIL.

The organization of the Council remains the same as last year, all the officers having been re-elected at the regular meeting in June, 1888. Of the members appointed by the General Synod, the term of Rev. G. H. Mandeville, D. D., expires with the June meeting.

II.—PROFESSORS.

To the Faculty has been added the Rev. John H. Gillespie, who having accepted his appointment as Professor of Greek, entered upon his work in September last.

Professor John W. Humphrey was also engaged from September, and, besides being employed in Normal instruction, has also rendered valuable assistance in other departments of study. All the professors have been enabled to perform their duties without interruption. The corps of instructors has been seven in the College and three in the Grammar School.

III.—STUDENTS.

The number of students that have attended the instruction of the Institution since April, 1888, is as follows:

In the Collegiate Department.....	44
In the Grammar School Department.....	180
In the Normal Department.....	88
Total.....	262

Good health, good moral deportment, and fair progress have marked the year.

At the commencement in June, 1888, the degree of A. B. was conferred upon the following: Henry Geerlings, Henry Harmeling, Foppe Klooster, John Lamar, Martin Ossewaarde, John Van Westinburg, and Peter J.

Zwemer, six of whom are studying for the ministry, and the degree of A. M., in course, on the six members of the class of 1885.

Vocal music and religious instruction have kept their place in the regular course. The ladies of the Institution have regularly met the matron, two hours a week, and have received regular instruction from her.

The weekly prayer meetings have been well sustained by the students, and the Y. M. C. A. is in a flourishing condition. Several students are engaged in Sunday school work in the vicinity of the College.

Good work has been done in the classes, and we may say, without fear of contradiction, that there is not in Michigan a Preparatory School with a more thorough course of study, or where students do more, or gain a better scholarship.

IV.—NORMAL DEPARTMENT.

The Normal Department has thus far been a signal success. The summer school for teachers, in July and August last, conducted by Prof. J. W. Humphrey of Wayland, assisted by Profs. Boers and Kleinheksel of the College, was attended by nearly one hundred scholars, no expense being incurred by the Council. There is every prospect that the attendance will be much larger during the coming summer. Prof. Humphrey, to whose labors much of this success is due, has been engaged for another year. He assists in the general instruction of the classes, using "Normal" methods so far as seems advisable. By these means it is expected that the College will widen its influence and gradually gain an increasing number of regular students.

V.—THE LIBRARY.

During the year over 900 bound volumes have been added to the library, and the number of books is now 7,925. The family of Rev. John Forsyth, D. D., deceased, has donated 407 volumes, Rev. M. G. Schoonmaker, D. D., 215 volumes, and Rev. J. W. Beardslee, D. D., over 100 volumes. Valuable gifts have come from the Senior class of 1889; from the Fraternal Society; from some of the professors and alumni; and from the Departments at Washington. A large number of pamphlets and periodicals have also been received. The Council hereby return thanks to all the donors, and are gratified that so much interest is taken in the library, and in making it fuller and more efficient.

VI.—"DE HOPE" AND "THE ANCHOR."

The *De Hope* remains as reported in 1887. The publisher states that its subscription list is on the increase, and over 2000 copies are printed weekly.

The students have established a monthly paper, called *The Anchor*, now in its second year, and doing credit to its editors and to the college.

VII.—THE GROUNDS AND BUILDINGS.

The grounds of the Institution are much admired, but they need a considerable outlay of money to clothe them in their proper beauty. The grading and graveling of the four bounding streets have cost our treasury

no small amount, and the council has not the means of providing for the due improvement of the property.

The President's house is yet in an unfinished condition; the Recitation Hall, so much needed, has not been begun, for the *support* of the Institution is claiming all the energy of the West; the proposed library and laboratory buildings are simply as dreams of what should be, but it may be seen how men like Suydam or Sage have here noble opportunities to do good and glorify the Master.

VIII.—THE TREASURY.

1.—CONTINGENT FUND.

Receipts.

Balance on hand, April, 1888.....	\$901 70
Interest from the Board of Directors.....	2,003 67
" " Permanent fund.....	1,564 54
" " Ebenezer fund.....	670 00
" " Alumni notes.....	88 06
Rents.....	506 25
Fees from students.....	1,788 50
Board of Education.....	200 00
Donations from churches.....	728 11
" " Individuals.....	178 25
Miscellaneous—for prizes.....	50 00
By loans.....	3,500 00
Total.....	\$11,908 07

Expenses.

Salaries of Professors.....	\$7,801 98
Salary of Janitor.....	311 00
Expenses of the Council.....	127 31
" " Treasury.....	112 10
Fuel and light.....	101 40
School requisites.....	163 25
Painting.....	103 05
Advertising.....	80 59
Commencement.....	29 35
Grounds and buildings.....	94 61
Taxes.....	316 51
Care of real estate.....	20 00
Interest.....	219 63
Sundries, including prizes.....	132 31
Transferred.....	129 98
Paid on note in bank.....	1,000 00
Balance on hand.....	1,210 08
Total.....	\$11,908 07

But on salaries there remains due, up to April 1st, the sum of \$1,639.05.

2.—PERMANENT FUND.

Receipts.

On hand, April, 1888.....	\$454 57
Donation from Mrs. Alida Meenk.....	1,325 00
Cash donations, through Rev. J. F. Zwemer.....	2,525 00
Donations, through Rev. D. Van Pelt.....	1,269 18

From David Terhune, Hackensack, N. J.....	\$1,000 00
First Ref. Church, Grand Haven, Mich.....	20 07
Second Ref. Church, Pella, Iowa.....	9 06
Rev. John Muller, Peoria, Ill.....	25 00
Principal of Alumni Notes.....	50 00
Contingent funds to be invested.....	-----
In the Mrs. Dr. Anderson scholarships.....	74 90
Mortgages and notes paid in.....	1,325 00
Total.....	<u>\$8,078 38</u>

Expenses.

Invested, through the committee.....	\$3,878 34
Expenses of collection.....	585 57
Balance on hand.....	3,614 47
Total.....	<u>\$8,078 38</u>

3.—LIBRARY FUND.

Receipts.

On hand, April, 1888.....	\$24 81
Transferred from contingent fund.....	46 98
Total.....	<u>\$80 79</u>

Expenses.

Paid for books and papers.....	\$12 24
Balance on hand.....	68 55
Total.....	<u>\$80 79</u>

Donations, to the amount of \$180, actually have been made to the library, but were first put into books and presented in that form.

4.—THE MRS. DR. ANDERSON SCHOLARSHIPS.

Receipts.

On hand, April, 1888.....	\$30 90
From the contingent fund, interest.....	84 00
Total.....	<u>\$144 90</u>

Expenses.

Transferred to permanent fund and invested on second scholarship.....	\$74 90
To Mr. Herman Van der Ploeg.....	52 50
Balance on hand.....	17 50
Total.....	<u>\$144 90</u>

5.—LIABILITIES.

Note to the Board of Benevolence.....	\$1,000 00
Holland City Bank.....	600 00
Due from the contingent to the permanent fund.....	3,500 00
Total.....	<u>\$5,100 00</u>

6.—CASH BALANCE.

Balance of contingent fund.....	\$1,210 08
permanent fund.....	114 47
library fund.....	68 55
Mrs. Dr. Anderson scholarships.....	17 50
Total.....	<u>\$1,410 55</u>

7.—INVESTMENTS.

"Charter endowment notes," \$3,308.25, of which interest is received from.....	\$3,300 00
Other individual notes.....	502 50
Mrs. Abbe fund.....	5,000 00
Other mortgages.....	18,989 84
Mrs. Dr. Anderson scholarships.....	1,288 90
Virginia Investments.....	1,596 00
Real estate, paying rent.....	5,450 00
In "De Hope," \$9,000, of which interest is received from.....	2,200 00
Awaiting investment.....	3,614 47
Total.....	\$41,921 21

HELD IN TRUST FOR THE COLLEGE.

By the "Classical Board".....	\$10,000 00
"Board of Direction".....	65,402 00
"Board of Education".....	1,000 00
Total.....	\$76,402 00

Total of productive funds, \$118,323.21, being an increase of \$6,052.46.

8.—REAL ESTATE.

This remains without material change. The lands remaining are:

The South Campus, two acres and house.....	\$2,400 00
One-half of lot 12, block 32, $\frac{1}{4}$ acre.....	450 00
Parts of blocks 14 and 23, 10 acres.....	1,000 00
Two detached lots, $\frac{1}{4}$ acre each.....	150 00
"Hope College Addition," $\frac{1}{2}$ acres.....	5,000 00
Point Superior lands, 613 acres.....	7,000 00
Total, by estimate.....	\$16,000 00

Real estate in and near the city is on the advance in value.

9.—REMARKS.

The income of the college shows a decrease of \$1,611.71, in the four items, of interest, fees, rents, and donations; the reasons for which need not be stated. Add the \$2,200 which the board of education has again felt itself unable to appropriate, and the amount is more than the added deficit of the year. No floating obligations are allowed, and the expenses have been confined to those which were actually necessary. The General Synod will see that the Council should be enabled to cancel its obligation of \$5,100, for the debt concerns the whole church as certainly as if it were for the cause of missions. The financial agents have been successfully at work, east and west, and have reason to hope that the full amount proposed will in the end be secured. Meantime the college can not possibly meet its expenses without the continued aid of the board of education.

IX.—OVERTURES.

In view of the fact that the College, during the past two years, has of necessity contracted a debt of \$4,500, of which sum \$3,500 is due to the Permanent Fund; and of the further fact that during the said two years the Board of Education has come \$4,400 short of appropriating to the College the amount recommended by the Synod (because the funds of the

Board did not permit), inasmuch also as there is no way for the Council to liquidate said debt from its own resources; therefore the Council respectfully asks the General Synod to take the following action.

Resolved, That the Board of Education be recommended to assume the said indebtedness of \$4,500 resting on Hope College, and borrow the money, if necessary, for the purpose; appealing to the churches for the payment of the debt, as do the Mission Boards under similar circumstances.

In view of the fact that the grounds and buildings at Hope College are the property of the General Synod, but that up to the present time all the expenses for the care and improvement of the same have been met by the Council, including about \$2,000 for the streets; and whereas at least \$1,500 are needed (and *much* needed) for said grounds and buildings during the coming year, which outlay our treasury cannot meet, therefore the General Synod is petitioned to add \$1,500 to its contingent fund for the next year, to be paid over to the Council for the said purpose.

In view of the fact, also, that the Financial Agents are appointed by the Council, and that their salary and expenses are being paid by the treasurer of the College, we recommend that the General Synod instruct the agents to remit all moneys collected by them to the treasurer of Hope College, and instruct the Council to distribute the same to the treasurers of the respective institutions concerned, according to the proportion adopted, viz.: 5, 3, 2, excepting such moneys as are specifically given to either of the institutions. These last are to be forwarded by the Council as designated by the donors.

X.—MISCELLANEOUS.

Except as to the finances, the last college year has been gratifying to both Faculty and Council.

The financial agents have been in the field for only a part of the year, but report cash and subscriptions to the amount of over \$25,000.

The President wishes to secure from the members of the Synod the money needed for finishing the President's House. The Council joins in an earnest wish that the effort may succeed. The residence, by all means, should be completed, and as the Synod of 1884 did so nobly in the matter, and as the edifice is to be credited to the Synod as "Synod's House," it would seem most appropriate to appeal as above.

For the next year the Council will especially need the \$200 per month, as hitherto asked, and wishes to be recommended to the Board of Education for said sum, and that the churches be urged so to increase the funds of the Board that it may comply with Synod's action without liability to debt.

PETER MOERDYKE,

Secretary.

KALAMAZOO COLLEGE.

REPORT OF THE PRESIDENT.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction.

DEAR SIR—I have the honor to submit herewith the report of Kalamazoo College for the year ending June 18, 1890:

BOARD OF TRUSTEES.

Class I—Term Expires in 1890.

Rev. Samuel Haskell, D. D., Ann Arbor.
Rev. R. E. Manning, M. S., Detroit.
Howard G. Colman, A. M., Kalamazoo.
Rev. E. H. E. Jameson, D. D., Lansing.
Daniel Putnam, A. M., Ypsilanti.
J. E. Howard, Esq., Grand Rapids.
Rev. C. E. Conley, A. M., Detroit.
Lyman S. Monroe, Esq., South Haven.
S. George Cook, B. S., Minneapolis, Minn.
Hon. Francis B. Stockbridge, Kalamazoo.
T. E. Barkworth, Esq., Jackson.
Joseph W. Hicks, A. M., Plainwell.

Class II—Term Expires in 1891.

Chauncey Strong, A. M., Kalamazoo.
Rev. Howard B. Taft, A. M., Paw Paw.
Rev. Zelotes Grenell, D. D., Detroit.
C. C. Bowen, Esq., Detroit.
Hon. William A. Moore, A. M., Detroit.
Schuyler Grant, A. M., Detroit.

Samuel A. Gibson, Esq., Kalamazoo.
William G. Howard, B. S., Kalamazoo.
Rev. Jesse S. Boyden, Novi.
Alanson J. Fox, Esq., Detroit.
Rev. W. L. Farnum, Flint.
G. T. Moody, Esq., Detroit.

Class III—Term Expires in 1892.

Rev. Asher E. Mather, D. D., Fenton.
Rev. Luther H. Trowbridge, A. M., Detroit.
William Bair, Esq., Vicksburg.
Rev. Theodore Nelson, LL. D., Saginaw City.
Rev. J. A. Johnston, Kalamazoo.
* Rev. John Donnelly, D. D., Grand Rapids.
D. A. Waterman, Esq., Detroit.
Rev. Charles R. Henderson, D. D., Detroit.
Rev. J. L. Cheney, Ph. D., Ypsilanti.
J. K. Johnson, Esq., Grand Rapids.
Nelson Eldred, Esq., Battle Creek.
Wooster W. Beman, A. M., Ann Arbor.

OFFICERS OF THE BOARD.

C. C. Bowen, Esq., *President.*
Rev. J. L. Cheney, Ph. D., *Secretary.*

J. E. Howard, Esq., *Treasurer.*
D. A. Waterman, Esq., *Auditor.*

Samuel Brooks, D. D., *Steward.*

* Deceased.

STANDING COMMITTEES OF THE BOARD.

Executive Committee.

Rev. M. A. Wilcox, D. D., *Chairman, (ex-officio)*; Chauncey Strong, A. M.; Wooster Beman, A. M.; Howard G. Colman, A. M.; Samuel A. Gibson, Esq.; William G. Howard, B. S.; Rev. Zelotes Grennell, D. D.

Finance Committee.

C. C. Bowen, Esq.; D. A. Waterman, Esq.; J. E. Howard, Esq.; Schuyler Grant, A. M.; Hon. William A. Moore, A. M.; Alanson J. Fox, Esq.

Examining Committee.

Rev. E. L. Little, A. M.; Prof. D. Putnam, A. M.; Rev. J. P. Phillips, A. M.; Rev. H. F. Cochrane, A. M.

FACULTY.

Rev. Monson A. Willcox, D. D., *President and Professor of Moral and Intellectual Philosophy.*

Rev. Samuel Brooks, D. D., *Professor of the Latin Language and Literature.*

Alexander Hadlock, Ph. M., *Professor of Mathematics.*

George W. Botasford, A. M., *Professor of the Greek Language and Literature.*

Charles J. Galpin, A. M., *Professor of Logic, Rhetoric, Oratory, and History.*

Ervin S. Ferry, B. S., *Professor of the Natural Sciences.*

Perry F. Trowbridge, *Instructor in German and the Natural Sciences.*

Mary A. Sawtelle, *Instructor in French, and English Literature.*

Clarissa S. Bigelow, Ph. B., *Instructor in Latin, and the English Branches.*

F. H. Rohner, *Instructor in Vocal Music.*

Prof. Samuel Brooks, *Librarian.*

SUMMARY OF STUDENTS.

Seniors.....	5
Juniors.....	7
Sophomores.....	10
Freshman.....	18
College Electives.....	7
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Fourth Preparatory.....	10
Third Preparatory.....	18
Second Preparatory.....	40
First Preparatory.....	48
Preparatory Electives.....	20
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TABLE OF STUDIES.

	<i>a—Classical.</i>	<i>b—Greek-Scientific.</i>	<i>c—Latin-Scientific.</i>	<i>d—English-Scientific.</i>
	PREPARATORY DEPARTMENT.			
	FIRST YEAR.	SECOND YEAR.	THIRD YEAR.	FOURTH YEAR.
1st.	Arithmetic.	a. b. c. d.	Complete Algebra.	Geometry.
	English Grammar.	a. b. c. d.	Chemistry.	French.
	Political Geography.	a. b. c. d.	Beginning Greek.	Anabasis.
2d.	Arithmetic.	a. b. c. d.	Cicero's Orations.	Vergil.
	English Grammar.	a. b. c. d.	General History.	German.
	Physical Geography.	a. b. c. d.		
3d.	Arithmetic.	a. b. c. d.	Complete Algebra.	Geometry.
	English Grammar.	a. b. c. d.	Physics.	French.
	Physical Geography.	a. b. c. d.	Beginning Greek.	Lysias.
4d.	Arithmetic.	a. b. c. d.	Cicero's Orations.	Vergil.
	English Grammar.	a. b. c. d.	General History.	German.
	Physical Geography.	a. b. c. d.		
5d.	Arithmetic.	a. b. c. d.	Rhetoric.	Geometry.
	English Grammar.	a. b. c. d.	Physics.	French.
	U. S. History.	a. b. c. d.	Anabasis.	Lysias.
6d.	Arithmetic.	a. b. c. d.	Ovid.	Roman History.
	English Grammar.	a. b. c. d.	General History.	German.
	U. S. History.	a. b. c. d.		

COLLEGIATE DEPARTMENT.

Term.	FRESHMAN.	SOPHOMORE.	JUNIOR.	SENIOR.
1st.	Trigonometry. Homer's Illad. De Senec. et de Aml. Biology. Advanced French. English History.	General Geometry. German. Chemistry. French. a.	Physics. English Literature Astronomy. Mechanics.	Psychology. History. History of Philos. b. c. d.
2d.	University Algebra. Herodotus. Livy. Biology. Advanced French. English History.	Calculus. German. Chemistry. Sophocles. French. a.	Logic. English Literature. Physics. Greek.	Moral Philosophy. History. Natural Theology. a. b. c. d. a. b. c. d. b. c. d.
3d.	University Algebra. Grecian History. Odes of Horace. Advanced French. Surveying. English History.	Rhetoric. German. Satires of Horace. General Geometry. French. a.	Geology. English Literature. Latin. Greek.	Pottical Economy. History. Evidences of Ch'y. a. b. c. d. a. b. c. d. b. d.

ADMISSION.

Applicants are admitted to any course of study on satisfactory examination in prescribed studies, or on approved certificate of graduation. The following studies are prescribed for admission:

TO THE FRESHMAN CLASS.

Classical Course.

English: English Grammar; Rhetoric. Geography: Political Geography; Physical Geography; Ancient Geography. History: United States History; Roman History. Mathematics: Arithmetic; *Olney's* Complete School Algebra or an equivalent; *Olney's* New Elementary Geometry or an equivalent. Greek: First Lessons and Grammar; Xenophon's *Anabasis*, three books; Lysias, 80 pages; *Jones's* Prose Composition. Latin: First Lessons with Grammar and Prose Composition; Cæsar, four books; six orations of Cicero; 2,500 lines of Ovid; six books of Vergil's *Aeneid*.

Greek—Scientific Course.

English: English Grammar; Rhetoric; studies in English. Geography: Political Geography; Physical Geography; Ancient Geography. History: United States History. Science: Physiology; Botany; Chemistry; Elementary Physics; Civil Government; Book-Keeping. Mathematics: Arithmetic; *Olney's* Complete Algebra or an equivalent; *Olney's* New Elementary Geometry or an equivalent. Greek: First Lessons and Grammar; Xenophon's *Anabasis*, three books; Lysias, 80 pages; *Jones's* Prose Composition. Modern Languages: French Grammar and one term's work each of modern prose and classic plays (Corneille and Racine).

Latin—Scientific Course.

English: English Grammar; Rhetoric. Geography: Political Geography; Physical Geography; Ancient Geography. History: United States History; Roman History. Science: Elementary Physics; Chemistry. Mathematics: Arithmetic; *Olney's* Complete Algebra, or an equivalent; *Olney's* New Elementary Geometry, or an equivalent. Latin: First Lessons with Grammar and Prose Composition; six orations of Cicero; 2,500 lines of Ovid; four books of Cæsar; six books of Vergil's *Aeneid*. Modern Languages: French Grammar and one term's work each of modern prose and classic plays (Corneille and Racine).

English-Scientific Course.

English: English Grammar; Rhetoric; Studies in English. Geography: Political Geography; Physical Geography. History: United States History; *Swinton's* Outlines of History, or an equivalent. Science: Elementary Physics; Chemistry; Astronomy; Botany; Civil Government; Physiology; Book-keeping. Mathematics: Arithmetic; *Olney's* Complete Algebra, or an equivalent; *Olney's* New Elementary Geometry, or an equivalent. Modern Languages: French Grammar and one term's work each of modern prose and classic plays (Corneille and Racine); German.

The following studies are prescribed for admission

TO THE PREPARATORY DEPARTMENT.

English: Reading; Spelling; and an elementary knowledge of English Grammar. Geography: Common School Geography. Mathematics: Arithmetic as far as Common Fractions.

Applicants are admitted

TO ADVANCED STANDING

In any course on satisfactory examination in all the studies of that course requisite to the desired standing, or on approved certificate that the applicant has successfully pursued them.

Applicants are admitted to elective courses in the discretion of the Faculty.

BUILDINGS.

There are at present three excellent buildings on the College Grounds. The Dormitory, situated on College Hill, has been recently repaired throughout. It contains a large number of neat and convenient study rooms, with adjoining bed rooms. The College Library, the Young Men's Christian Association rooms, and the rooms of the Sherwood Rhetorical Society, and of the Philolexian Lyceum are also in this building.

Kalamazoo Hall, erected in recent years, contains on the first and second floors ten rooms for recitation and other purposes. A spacious chapel, occupying the third floor, and the hall of the Eurodelphian Society are in this building.

The new Ladies' Hall was erected by the Ladies' Hall Association of the State and transferred to the College in October, 1887. It is built of brick, with block-stone foundation, is three stories in height, and has an attractive location on the summit of a hill, crowned by a beautiful grove.

The plan of the building is similar to that of the students' cottages at Smith College. Each room is designed to be occupied by two students. The building is heated by steam, is appropriately furnished, and will accommodate at least thirty. The young women are expected to share in the domestic duties of the Hall one hour daily. The cost of living is thus materially reduced, some experience in systematic housekeeping gained, and a commendable spirit of self-dependence fostered, while mutual labors in behalf of the common good bear their natural fruit in the refinement of the moral nature.

Table board is furnished at \$2 per week, payable monthly, in advance.

Room rent, payable monthly, in advance, is \$1 or 75 cents per week, according to the desirableness of the room.

An additional charge of fifty cents per week is made in case the student prefers not to assist in the domestic duties beyond the care of her own room. Occupants of rooms are expected to furnish their own sheets, pillow-slips, towels, white spreads, napkins, and soap. No charge is made for fuel and lights, nor for the washing of room-linen and napkins.

All charges are as low as the cost of supplies and service will permit.

A telephone connects the building with the general city service.

The students of the Hall are under the supervision of Mrs. Elizabeth Brooks, and the domestic arrangements are superintended by an efficient steward and matron.

Young women are not required to room in the Hall, but its appointments are so convenient, and its administration so elevating and homelike, that it affords a natural and attractive home during the college year.

GROUNDS.

The College grounds comprise twenty-five acres, embracing a majestic hill, whose sides and summit, adorned with groves of noble trees, afford a commanding view of the beautiful city beneath. Plans for the proper grading and dressing of these grounds, indicating the drives, walks, and new buildings regarded as necessary and appropriate to the natural features of the locality, have been drawn, and are under advisement by a committee of the trustees.

EXPENSES.

Tuition in any department.....	\$8.50 per term
Room rent in the dormitory.....	\$4.00 and \$5.00 "
Board for young men at the Ladies' Hall.....	\$2.25 per week

There are also approved private boarding houses near the College, where board, either with or without rooms, can be obtained at reasonable rates. Students frequently board themselves in their own rooms in private houses, or get their meals in clubs, and thus diminish their expenses.

Those who desire it can generally find remunerative employment for their leisuréd hours, and thus help to pay their expenses.

A matriculation fee of five dollars is to be paid on first entering the collegiate classes.

For expenses for young women at the Ladies' Hall, see "Buildings."

All bills must be paid in advance.

BENEFICIARY AID.

Young men seeking preparation for the ministry, who bring letters from their respective churches, expressing approval of their purpose, and who evince piety, industry, and aptitude, may receive free tuition and room-rent, and such additional aid as the beneficiary funds, and the annual offerings of the churches and friends of the College render available.

Young men not preparing for the ministry and young women sometimes receive aid from beneficiary funds not restricted to ministerial students.

ADDITIONAL ENDOWMENT.

The movement recently started to add \$100,000 to the endowment funds of the College has resulted thus far in securing pledges to the amount of \$35,000, exclusive of \$5,000 promised on special condition.

Meanwhile, by steady growth, the Olney Memorial Fund has reached a total of \$10,000. The Alumni Professorship Fund, also, has received some addition.

Thus, virtually, the college funds have been increased during the year \$45,000 or \$50,000; and there is every reason to expect that, through the generous fidelity of the friends of the college and christian education, the whole amount of \$100,000 will be secured by the close of the next college year.

RECENT CHANGES.

The life of the College exhibits various signs of improvement.

The first year of the preparatory department, recently introduced to support an almost universal lack of preparation evinced by applicants for admission, is proving its necessity by the large number enrolled in its classes.

Increased emphasis placed on rhetorical and oratorical training is bearing legitimate fruit, as seen in the greater excellence of the work of the students both in composition and in speaking.

A more thorough system of entrance and class examinations; the discontinuance to students in regular courses of the privilege of pursuing studies in advance of their rank; some modification of the elective privilege in the preparatory department; a more exact method of registration;—these and other causes are producing a better quality of class-room work; increasing the number of those in regular courses; securing a less transient body of students; and adding zest and vigor to the college life in general.

Respectfully submitted,

MONSON A. WILLCOX,
President.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction:

SIR—Your committee appointed to visit Kalamazoo College submit the following report:

At the time of our visit in May we found the College in a prosperous condition financially, being free from debt. The property is valuable, and with the growth of the city will increase in value each year. The invested funds of the institution amount to about \$120,000, and an effort is being made to secure special endowments which promise success, and which will add greatly to the advancement of its work and usefulness.

The Faculty has undergone some changes during the past year. Rev. Monson A. Willcox, D. D., a gentleman of excellent mental endowments, is now President, having succeeded Rev. Dr. Kendall Brooks, who for many years was at its head. With the President are associated five professors and four instructors in special work.

It occurred to your committee that two of the professors were quite young and seemingly inexperienced, and yet their work was well spoken of. We thought for the most part the professors were thoroughly competent. At the present time there are 181 students—142 in the preparatory department, and of the 39 students in the college classes, 11 are electives. Only four are to be graduated this year. It will be seen, therefore, that the institution is

more of a preparatory school than a college. In the college classes there are eleven females, and in the preparatory department sixty-one. The Young Ladies' Hall, which has recently been erected, is a fine and commodious building, beautifully situated on the hill, in which students can obtain board and rooms at a low price.

The preparatory students seem to be quite varied in their attainments, so that it is difficult for a teacher to give uniform instruction to students so unlike in their development, or to secure such deportment as the class room and chapel exercises require; and yet, on the whole, the students presented fairly good conduct.

The College heretofore has done good work, and many have gone from its instruction who have taken important and useful positions in society, and with the increased facilities which the Trustees hope soon to have by the repairing of the old building on the hill, to be used entirely for the college classes, while the present building will be used for the preparatory school, your committee think their work and influence will be greatly increased.

Respectfully submitted,

MRS. B. W. JENKS,
E. H. E. JAMESON,
HENRY A. HARMON,
State Board of Visitors.

MICHIGAN FEMALE SEMINARY.

REPORT OF THE PRINCIPAL.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction :

DEAR SIR—I herewith present my report of Michigan Female Seminary for the academic year 1888-9, as required by the statutes of this State.

The Trustees are twenty-one in number, as follows:

Mr. W. O. Hughart, Grand Rapids, *President*.

Rev. J. A. Ranney, D. D., Kalamazoo, *Secretary*.

Mr. Daniel O. Roberts, Kalamazoo, *Treasurer*.

Rev. Howard Duffield, D. D., Detroit; Hon. E. O. Humphrey, Kalamazoo; Hon. Jonathan Parsons, Kalamazoo; *Mr. L. H. Trask, Kalamazoo; Mr. H. A. Chapin, Niles; Mr. John den Bleyker, Kalamazoo; Rev. W. A. McCorkle, Detroit; Mrs. Jeannette F. Moore, Three Rivers; Mrs. Moses Smith, Chicago, Ill., Mr. F. E. Woodward, Kalamazoo; Mr. William Widdicomb, Grand Rapids; Mr. Amos Musselman, Grand Rapids; Hon. E. P. Ferry, Grand Haven; Mrs. Norman Geddes, Adrian; Joseph Sill, M. D., Kalamazoo; Mr. W. H. McCourtie, Kalamazoo; Rev. D. M. Cooper, Detroit; Mrs. James McNab, Kalamazoo.

THE FACULTY.

Isabella G. French, A. B., *Principal, Psychology and Ethics*.

Belle F. Eggleston, *Latin*.

Kate W. Hitchcock, B. S., *French and German*.

Harriet R. Pierce, B. S., *Science and Mathematics*.

Sara A. Pratt, B. A., *History and Literature*.

Maria Holley, *Drawing and Painting*.

Marie C. Jones, *Painting* (spring term).

Imogene Thayer, *Music*.

E. J. Munger, *Matron*.

Besides the care of their own departments, the teachers have shared the work in English Composition, Bible teaching and Physical Training.

The regular course of study covers four years. Diplomas are given those who successfully complete the required studies with four years elections in English, French, German, Latin, or Greek.

* Deceased.

First or Junior Year.

Required Studies :—Algebra, three terms ; Ancient History, Physiology, Botany, each one term.

Electives :—Latin, German, French, Greek, History of the English Language, each three terms.

Second or Junior Middle Year.

Required Studies :—Plane and Solid Geometry, three terms ; English History, French History, Civil Government, each one term.

Electives :—Latin, German, French, Greek, each three terms ; United States Constitutional History, two terms ; American Literature, one term.

Third or Senior Middle Year.

Required Studies :—English Literature, Physics, each two terms ; Chemistry, Geology, each one term.

Electives :—Latin, German, French, Greek, History of Civilization and Criticism of Authors, each three terms.

Fourth or Senior Year.

Required Studies :—Psychology, Ethics, Christian Evidences, each one term ; History of Literature, two terms ; History of Art, one term.

Electives :—Logic, Political Economy, Astronomy, each one term ; Latin, German, French, Greek, each three terms.

The Latin course occupies four years besides the preparatory work in Latin Grammar, divided thus :

First Year :—Cæsar, Roman Military Art, Grammar.

Second Year :—Cicero's Orations, Etymology and Syntax.

Third Year :—Virgil's Aeneid, Latin Prosody, Mythology, Classical Geography.

Fourth Year :—Livy, selections from books XXI and XXII ; Horace, Odes, Satires and Epistles, selected ; sight reading from different authors.

Prose composition is practiced throughout the four years.

In French and German four years' study is offered, the first two years in each case being given to study of the grammar, conversation, translation, and composition, the last two occupied with historical study of the literature, special attention being devoted to important epochs and authors.

Courses in Bible study and English composition were formally marked out and definitely followed, for the first time, this year. They are as follows :

English Composition, (one recitation per week.)

First Year :—Structure of the sentence and paragraph, capitalization, punctuation, diction ; exercises in the simpler forms of writing, such as paraphrase, reproduction, letters.

Second Year :—Figures of speech, narration, description, illustrative reading from standard authors.

Third Year :—Properties of style, study of selections from English and American authors, argumentation, oration.

Fourth Year :—Book reviews, criticism of authors, character studies, formal essays.

Bible Study. (Two recitations per week.)

First Year :—General structure of the Bible ; special studies in Genesis ; history of the Israelites to the establishment of the monarchy.

Second Year :—Old Testament history, beginning with the monarchy ; literature of important periods.

Third Year :—Inter-Biblical history ; life of Christ.

Fourth Year :—Foundation and early history of the Christian Church.

In the other departments the plans of work are not materially changed, except that an advanced year of mathematics is offered as elective, and larger facilities are given in scientific work, drawing and painting, by changes in the building, that will be mentioned later in this report.

The library contains more than fifteen hundred volumes, and is growing at the rate of over a hundred volumes a year.

A very encouraging change for the better is noticeable in the quality of intellectual work done in the school, owing, perhaps, in part to increasing care to admit no students under fifteen years of age, and none poorly prepared.

The remarkably good health of the students during the year we believe to be due in large measure to the improvements made in the building. Part of the fund known as the "Dodge Legacy" was used to put the building in perfect repair, to build the Smead system of dry closets, to put in a Hale hydraulic passenger elevator, to change one of the old steep staircases to a flight of broad, easy stairs, to provide a suitable room for an art studio, a commodious gymnasium, more recitation rooms, and a multitude of less obvious, but much needed conveniences. That these improvements were appreciated by the friends of the school is shown by the number of new students who entered in January, and now our need is for enlargement.

It is most important that money be raised for permanent endowment of the school, since far more is given to students than the low fees for board and tuition would warrant. The two-fold purpose of the trustees to maintain low rates and a high standard make endowment imperative.

It is encouraging to note, however, that the institution is free from debt, and the prospects in all respects are most hopeful.

Respectfully submitted,

ISABELLA G. FRENCH,
Principal.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction :

SIR—The undersigned visited Michigan Female Seminary May 16-17, studying methods of instruction in classes, examining dormitories, and the general facilities for school work.

The putting in of an elevator and other improvements make the building exceedingly comfortable ; and the pleasant outlook from the windows and neat and tasteful interior leave little to be desired from an æsthetic standpoint.

Under Miss Isabella G. French, the efficient principal, the physical, intellectual, moral, and religious culture of the students is carefully considered. Special attention is paid to Bible study, English composition and literary criticism. We were impressed with the thorough methods and earnestness of the teachers in Latin, French and German, Science and Mathematics. In these departments the reflex influence was apparent in class enthusiasm.

Practical work was in progress in botany; the pea and bean had been sprouted in boxes by the students, carefully dissected and analyzed with descriptive drawings of the several parts.

The music department is ably conducted and remarkably well equipped. A good beginning has been made in art, and the collection of a cabinet of minerals and fossils is well under way.

In the library, the not extensive collection showed discriminating use. A most excellent array of reference books in science and Bible study, on the reading table, evinced studious care on the part of the learner to add to knowledge acquired from the text-book.

Under direction of an efficient matron, the pupils aid in the lighter domestic work of the family, which tends to enhance the home feeling and cultivate self-helpfulness and industry.

The mutual sympathy and good will between pupils and teachers were pleasing features and indicated that discipline in the school is not arbitrarily repressive, but is based upon appreciation of the highest type of womanhood and unostentatious courtesy.

Limited resources hamper the ambitious principal and lay heavy burdens upon the instructors, with consequent loss of most valued teachers who accept more lucrative positions elsewhere.

There seems to be every incentive to those having financial ability to place at the disposal of the management facilities for the fulfillment of the broad and comprehensive plans so nobly begun.

M. E. D. TROWBRIDGE,
M. S. GERLS,
MARGARET S. JENKS,
State Board of Visitors.

MICHIGAN MILITARY ACADEMY.

REPORT OF THE SUPERINTENDENT.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction:

DEAR SIR—I have the honor to present this, my eleventh annual report of the Michigan Military Academy.

The academic staff for the year 1888-9 was as follows:

Col. J. Sumner Rogers, *Superintendent.*

William H. Butts, A. M., *Principal, Mathematics.*

Thomas Bertrand Bronson, A. M., *Modern Languages.*

Delos Dan Jayne, B. S., *History and Literature.*

Lieut. Frederick S. Strong, 4th U. S. Artillery, *Military Law and Art of War.*

William Otis Waters, A. B., *Greek and English.*

Irvah L. Winter, A. B., *Elocution and Rhetoric.*

Asst. Engr. Frank W. Bartlett, U. S. Navy, *Physics, Drawing, and Mathematics.*

Lieut. Frederick T. Van Liew, 2d U. S. Infantry, *Military Science and Tactics.*

Erle H. Sargent, M. S., *Sciences.*

The number of cadets enrolled during the year was 184, an increase of 43 over 1887-8. Of this number 45 per cent. came from Michigan, and the remainder represented fifteen States and Territories and one foreign country. In their courses of study they were classified as follows: Preparatory, 35; Classical, 13; Latin, 8; Scientific, 33; Academy, 94.

The graduating class numbered nineteen, of whom eleven enter college, seven follow business pursuits and one returns to the Academy as assistant commandant of cadets.

The Alumni of the Academy now number 133: Classical, 18; Latin, 8; Scientific, 40; Academy, 33; English, 34. Seventy-one have continued their studies in higher institutions and sixty-two have chosen business.

The following changes in the courses of study will take effect September, 1889:

The Academy Course will be extended by adding a second year of Language, a second half-year of Law, one-half year of the Art of War and one-half year of Military Law, or Higher Algebra and Trigonometry. The work in English Literature will be extended to a full year and the scientific requirements reduced from three years to two. Students may be recommended to the English (B. L.) course in college at the end of the third year of the Academy course.

In all courses one year of Physics and one-half year of Botany or Physiology will be required.

Very respectfully, your obedient servant,

J. SUMNER ROGERS,

Colonel M. S. Troops, Supt.

OLIVET COLLEGE.

REPORT OF THE PRESIDENT.

HON. JOSEPH ESTABROOK,

Superintendent of Public Instruction:

DEAR SIR:—In obedience to the law which requires me to lay before the Superintendent of Public Instruction the names of the trustees and the faculty, the courses of study and any other facts that may be needed to show the conditions of the College, I take pleasure in submitting my report for the academical year of 1888-9.

The corporation of the College consists of twenty-five trustees, who choose their own successors, the president of the College is *ex-officio* the head of the corporation, and the connecting link between the trustees and the faculty.

CORPORATION.

REV. HORATIO Q. BUTTERFIELD, D. D., *President.*

Term Expires 1889.

Rev. James L. Patton, Greenville.

Harvey J. Hollister, Esq., Grand Rapids.

Rev. Philo R. Hurd, D. D., Detroit.

Hon. Alanson Sheley, Detroit.

Term Expires 1890.

Homer O. Hitchcock, M. D., Kalamazoo.

Philo Parsons, Esq., Detroit.

Fitz L. Reed, Esq., Olivet.

Dexter M. Ferry, Esq., Detroit.

Term Expires 1891.

Rev. Wolcott B. Williams, Charlotte.

Isaac C. Seeley, Esq., Minneapolis, Minn.

Rev. Leroy Warren, Lansing.

Rev. A. Hastings Ross, D. D., Port Huron.

Term Expires 1892.

Rev. Joseph L. Daniels, Olivet.

Hon. Jacob S. Farrand, Detroit.

Henry Fralick, Esq., Grand Rapids.

Rev. John H. Barrows, D. D., Chicago, Ill.

Term Expires 1893.

Hon. James McMillan, Detroit.

Frank S. Belcher, Esq., Charlotte.

Rev. Henry H. Northrop, Flint.

Rev. Job Pierson, D. D., Ionia.

Term Expires 1894.

David Whitney, Jr., Esq., Detroit.

Hon. Oramel Hosford, Olivet.

Hon. Sullivan M. Cutcheon, Detroit.

Hon. Asa K. Warren, Olivet.

The immediate care of the College is entrusted to these officers and committees:

Executive Committee.—H. Q. Butterfield, Chairman; A. K. Warren, J. L. Daniels, O. Hosford, F. L. Reed.

Library Committee.—H. Q. Butterfield, H. C. Bumpus, J. L. Daniels.

Advertising Committee.—W. B. Williams, H. Q. Butterfield, H. C. Bumpus.

Secretary and Assistant Treasurer.—George W. Keyes.

Treasurer.—Frank S. Belcher.

Financial Agent.—Rev. W. B. Williams.

FACULTY.

Rev. Horatio Q. Butterfield, D. D., *President, Drury Professor of Mental and Moral Philosophy.*

Rev. Oramel Hosford, A. M., *Stone Professor of Astronomy and Natural Philosophy, and Instructor in Mathematics.*

Rev. Joseph L. Daniels, A. M., *Parsons Professor of the Greek Language and Literature.*

Rev. Joseph Estabrook, A. M., *Professor of Logic and English Literature, and Principal of the Normal Department.*

Stewart Montgomery, A. M., *Professor of Chemistry and Physiology.*

Edwin F. Norton, A. M., *Professor of Rhetoric and Modern Languages.*

[To be filled September, 1889,] *Rutan Professor of the Latin Language and Literature.**

Hermion C. Bumpus, Ph. B., *Professor of Biology and Geology.*

Herman W. Dubee, *Professor of Music.*

Hamilton King, A. M., *Principal of the Preparatory Department, and Instructor in Greek and History.*

George N. Ellis, A. M., *Instructor in Latin.*

Henry D. Wild, A. B., *Instructor in English, Penmanship, and Book-keeping.*

Mrs. Aurelia Burrage, *Principal of the Ladies' Department, on the Dennis Foundation.*

Miss M. Ida Swindt, *Instructor in Mathematics.*

Ella M. Kedzie, A. B., *Instructor in Painting and Drawing.*

Miss Anna B. Shepard, *Instructor of Vocal Music.*

Miss Nellie I. Herrick, *Teacher of the Piano and Organ.*

Joseph L. Daniels, A. M., *Librarian.*

SUMMARY OF STUDENTS.—COURSES.

College—

Classical course.....	50
Scientific course.....	87
Literary course.....	83

119

* Duties discharged by Profs. Norton and Wild.

Preparatory—		
Classical course.....	54	
Scientific course.....	14	
Literary course.....	87	
		106
Normal and elective.....	53	
Conservatory of music.....	57	
Art.....	89	
		149
		373
Deduct for names inserted twice.....		96
Total.....		277

GRADUATES AT THE LAST COMMENCEMENT.

Classical course.....	8
Literary course.....	6
Scientific course.....	5
Master of Arts (in course).....	6
Honorary degree of D. D.....	2

COURSES OF STUDY.

COLLEGE.

CLASSICAL COURSE.

Freshman Year.—First Term.

Latin : Livy. Studies in the Military and Political Antiquities of Rome.

Greek : Homer—The Odyssey. Lectures on the Homeric Poems. Greek Prose Composition.

Mathematics : Algebra completed.

Oratory : * Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Second Term.

Latin : Horace—Odes. Catullus.—Selections. Lectures on Roman Literature.

Greek : Selections from Herodotus and Thucydides. Lectures on Greek History. Greek Testament.

Mathematics : Geometry completed.

Oratory : Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Third Term.

Greek : Plato—The Apology and Crito. Greek Testament.

Natural Science : Botany—Phænogams, with Laboratory work.

Mathematics : Trigonometry—Plane and Spherical.

Oratory : Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

*Lessons in the Bible or Greek Testament, and Oratory, weekly throughout the course.

Sophomore Year.—First Term.

Latin (8 h.): Terence—Andria. Exercises in Latin Conversation.

Greek (8 h.): Xenophon—Memorabilia.

English: *Rhetoric*.†

Mathematics: *Analytical Geometry*.

French: *Grammar*. *Chardenal's First French Course*.

German: *Grammar*. *Stern's Studien und Plaudereien, First Series*.

Natural Science: *Inorganic Chemistry*.

Oratory: Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Second Term.

Latin: Tacitus—Agricola. Pliny—Select Letters. Lectures on Philology.

English: History of English Literature.

Natural Science: *Inorganic Chemistry*. *Qualitative Analysis*.

French: *Grammar*. *Sauveur's Causees*. *Chardenal's French Exercises*.

German: *Grammar*. *Stern's Studien und Plaudereien, Second Series*.

Oratory: Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Third Term.

Latin: Juvenal—Select Satires. Studies in the Institutions and History of the Roman Empire.

Greek: *Æschylus*—Prometheus. Lectures on the Greek Drama.

French: *Chardenal continued*. *Knapp's Modern French Prose*.

German: *Classics*.

Mathematics: *Surveying and Field Work*.

Oratory: Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Junior Year.—First Term.

Latin (2 h.): Horace—Epistles and Select Satires.

Greek (8 h.): Sophocles.

German: *Nathan der Weise*—Lessing.

French: *Picciola*.

English: *Study of English Classics*—Chaucer, Spencer, Shakespeare, Milton, with Lectures.

History: *Ancient and Mediaeval History*.

Physics: *Mechanics and Hydrostatics*.

Oratory: Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Second Term.

Greek: Demosthenes—De Corona. Lectures on the Greek Orators and Oratory.

Metaphysics: *Logic*.

German: *Herman und Dorothea*—Goethe.

French: *La Triade Francaise*.

Physics: *Pneumatics, Acoustics, Light, Heat, and Electricity*.

†The subjects printed in italics are elective.

History : *History of England.*

Natural Science : *Human Anatomy and Physiology, and Hygiene.*

Oratory : Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Third Term.

Latin : Cicero—*De Natura Deorum.* Lectures on Roman Religion and Mythology.

German : *Faust—Goethe.*

French : *L'Allemagne—De Staël.*

Physics : *Astronomy.*

History : *History of France and Germany.*

Oratory : Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Senior Year.—First Term.

Metaphysics : Elements of Intellectual Science.

English : *Study of Later English Authors, with Lectures.*

Greek : *Sophocles—Edipus Tyrannus. Plato—Phædo. Lectures on Greek Philosophy.*

Natural Science : *Geology.*

Civil Polity : *Lieber on Civil Liberty.*

Oratory : Lectures and Exercises in Elocution and Oratory.

Second Term.

Metaphysics : Elements of Intellectual Science (half term).

Civil Polity : Political Economy.

History : *Constitutional History of the United States.*

Natural Science : *Advanced Work in any of the Sciences.*

Hebrew : *Davidson's Grammar (half term).*

Oratory : Lectures and Exercises in Elocution and Oratory.

Third Term.

Ethics : Moral Philosophy.

Hebrew : Davidson's Grammar continued. Selections from Genesis; or

Christianity : Evidences of Christianity, with Lectures.

Art : *Outline History, with Lectures on the Principles and Philosophy of Art.*

Latin : *Lucretius. Lectures on Roman Schools of Philosophy.*

Pedagogics : *Lectures—Development of the Human Faculties. Organization, Grading, and Management of Schools. History of Education.*

Oratory : A Thesis for Graduation.

Candidates for admission to the Freshman class who have pursued their preparatory studies elsewhere are examined in the following books and subjects, or their equivalents, or must show satisfactory certificates for the same:

Latin Grammar, including Prosody.

Cæsar, two books.

Cicero, seven orations.

Virgil, three Bucolics and six books of the *Æneid*.

Jones' Latin Prose Composition, or equivalent.

Smith's Smaller History of Greece, or equivalent.

Leighton's History of Rome through the Republic, or equivalent.

Greek Grammar, including Prosody.

Xenophon, Anabasis, three books.

Jones' Greek Prose Composition, or equivalent.

* Homer, Iliad, two books.

Higher Arithmetic, including the Metric System.

Algebra, through Quadratic Equations.

Plane Geometry.

English Grammar and Geography.

Civil Government and United States History.

All Candidates for advanced standing in this and the following courses are examined, in addition to the preparatory studies, in those already pursued by the class which they propose to enter.

SCIENTIFIC COURSE.

Freshman Year—First Term.

History (3 h.): Roman History and Geography.

Latin: Cicero. Exercises in Writing.

Mathematics: Algebra completed.

English: † Essays, Discussions, and Declamations. Drill in Elocution.

Second Term.

History (3 h.): Greek History and Geography.*

Latin: Cicero. Exercises in Composition.

Mathematics: Geometry completed.

English: Essays, Discussions, and Declamations. Drill in Elocution.

Third Term.

Latin: Cicero. Exercises in Composition.

Natural Science: Botany—Phænogams, with Laboratory work.

Mathematics: Trigonometry—Plane and Spherical.

English: Essays, Discussions, and Declamations. Drill in Elocution.

Sophomore Year—First Term.

English: Rhetoric.

Natural Science: Inorganic Chemistry.

Mathematics: *Analytical Geometry*. ‡

French: *Grammar*. *Chardenal's First French Course*.

German: *Grammar*. *Stern's Studien und Plaudereien, First Series*.

English: Essays, Discussions, and Declamations. Drill in Elocution.

Second Term.

Natural Science: Inorganic Chemistry. Qualitative Analysis. Zoölogy.

Drawing (2 h.): *Mechanical Drawing*.

French: *Grammar*. *Sauveur's Causeries*. *Chardenal's French Exercises*.

*In place of the Homer, the last six books of Virgil's *Æneid* or 2,000 lines of Ovid will be accepted.

† Lessons in the Bible and English or Oratory, weekly, throughout the course.

‡ The subjects printed in italics are elective.

German : *Grammar. Stern's Studien und Plaudereien, Second Series.*

English : *Essays, Discussions, Declamations, and Orations. Drill in Elocution.*

Third Term.

Mathematics : *Surveying and Field Work.*

Natural Science : *Organic Chemistry. Qualitative Analysis, with a Course in the Determination of Minerals.*

Natural Science : *Zoölogy—Advanced Work.*

French : *Chardenal continued. Knapp's Modern French Prose.*

German : *Classics.*

English : *Essays, Discussions, Declamations, and Orations. Drill in Elocution.*

Junior Year—First Term.

Physics : *Mechanics and Hydrostatics.*

Natural Science : *Botany—Physiological and Cryptogamic.*

English : *Study of English Classics—Chaucer, Spenser, Shakespeare, Milton, with Lectures.*

German : *Nathan der Weise—Lessing.*

French : *Picciola.*

History : *Ancient and Mediæval History.*

Oratory : *Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.*

Second Term.

Physics : *Pneumatics, Acoustics, Light, Heat, and Electricity.*

Natural Science : *Human Anatomy and Physiology, and Hygiene.*

Metaphysics : *Logic.*

German : *Herman und Dorothea—Goethe.*

French : *La Triade Francaise.*

History : *History of England.*

Oratory : *Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.*

Third Term.

Physics : *Astronomy.*

German : *Faust—Goethe.*

French : *L'Allemagne—De Staël.*

History : *History of France and Germany.*

Oratory : *Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.*

Senior Year.—First Term.

Metaphysics : *Elements of Intellectual Science.*

Natural Science : *Geology.*

Civil Polity : *Lieber on Civil Liberty.*

English : *Study of Later English Authors, with Lectures.*

Oratory : *Lectures and Exercises in Elocution and Oratory.*

Second Term.

Metaphysics : *Elements of Intellectual Science (half term).*

Natural Science : *Advanced Work in any of the Sciences.*

Civil Polity : *Political Economy.*

History : *Constitutional History of the United States.*

Oratory : Lectures and Exercises in Elocution and Oratory.

Third Term.

Ethics : Moral Philosophy.

Christianity : Evidences of Christianity, with Lectures.

Art : *Outline History, with Lectures on the Principles and Philosophy of Art.*

Pedagogics : *Lectures—Development of the Human Faculties. Organization, Grading, and Management of Schools. History of Education.*

Oratory : A Thesis for Graduation.

Candidates for admission to this course must sustain a satisfactory examination in the subjects outlined in the Scientific and Literary Courses, Preparatory Department, or must show satisfactory certificates for the same.

LITERARY COURSE.

Freshman Year.—First Term.

History (8 h.): Roman History and Geography.

Latin : Cicero. Exercises in Writing.

Mathematics : Algebra completed.

English : * Essays, Discussions, and Declamations. Drill in Elocution.

Second Term.

History (8 h.): Greek History and Geography.

Latin : Cicero. Exercises in Composition.

Mathematics : Geometry completed.

English : Essays, Discussions, and Declamations. Drill in Elocution.

Third Term.

Latin : Cicero. Exercises in Composition.

Natural Science : Botany—Phænogams, with Laboratory work.

Mathematics : Trigonometry—plane and Spherical.

English : Essays, Discussions, and Declamations. Drill in Elocution.

Sophomore Year.—First Term.

English : Rhetoric.

Latin : Virgil. Reading at sight. Composition.

French : *Grammar. Chardenal's First French Course.†....*

German : *Grammar. Stern's Studien und Plaudereien, First Series.*

Mathematics : *Analytical Geometry.*

Natural Science : *Inorganic Chemistry.*

English : Essays, Discussions, and Declamations. Drill in Elocution.

Second Term.

English : History of English Literature.

*Lessons in the Bible, and English or Oratory, weekly, throughout the course.
†The subjects printed in italics are elective.

Latin : Virgil. Reading at sight. Composition (Poetry into Prose).
 French : *Grammar. Sauveur's Causeries. Chardenal's French Exercises.*
 German : *Grammar. Stern's Studien und Plaudereien, Second Series.*
 Natural Science : *Inorganic Chemistry. Qualitative Analysis.*
 English : Essays, Discussions, Declamations, and Orations. Drill in Elocution.

Third Term.

Latin : Virgil. Reading at sight. Reviews.
 French : *Chardenal continued, Knapp's Modern French Prose.*
 German : *Classics.*
 Natural Science : *Zoölogy—Advanced Work.*
 English : Essays, Discussions, Declamations, and Orations. Drill in Elocution.

Junior Year—First Term.

German : *Nathan der Weise—Lessing.*
 French : *Picciola.*
 Physics : *Mechanics and Hydrostatics.*
 Latin : *Livy. Studies in Military and Political Antiquities of Rome.*
 English : *Study of English Classics—Chaucer, Spenser, Shakespeare, Milton, with Lectures.*
 History : *Ancient and Mediæval History.*
 Oratory : Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Second Term.

German : *Herman und Dorothea—Goethe.*
 French : *La Triade Française.*
 Metaphysics : *Logic.*
 Physics : *Pneumatics, Acoustics, Light, Heat, and Electricity.*
 Latin : *Horace—Odes. Catullus—Selections. Lectures on Roman Literature.*
 Natural Science : *Human Anatomy and Physiology, and Hygiene.*
 History : *History of England.*
 Oratory : Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Third Term.

German : *Faust—Goethe.*
 French : *L'Allemagne—De Staël.*
 Physics : *Astronomy.*
 Latin : *Juvenal—Select Satires. Studies in the Institutions and History of the Roman Empire.*
 History : *History of France and Germany.*
 Oratory : Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Senior Year—First Term.

Metaphysics : Elements of Intellectual Science.
 Natural Science : *Geology.*
 Civil Polity : *Lieber on Civil Liberty.*
 English : *Study of Later English Authors, with Lectures.*
 Oratory : Lectures and Exercises in Elocution and Oratory.

Second Term.

Metaphysics : Elements of Intellectual Science (half term).

Civil Polity : Political Economy.

Natural Science : *Advanced Work in any of the Sciences.*

History : *Constitutional History of the United States.*

Oratory : Lectures and Exercises in Elocution and Oratory.

Third Term.

Ethics : Moral Philosophy.

Christianity : Evidences of Christianity, with Lectures.

Art : *Outline History, with Lectures on the Principles and Philosophy of Art.*

Latin : *Lucretius. Lectures on Roman Schools of Philosophy.*

Pedagogics : *Lectures—Development of the Human Faculties. Organization, Grading, and Management of Schools. History of Education.*

Oratory : A Thesis for Graduation.

Candidates for admission to this department must sustain a satisfactory examination in the subjects outlined in the Scientific and Literary Courses, Preparatory Department, or must show satisfactory certificates for the same.

COURSES OF STUDY.

PREPARATORY DEPARTMENT.

CLASSICAL COURSE.

In order to pursue profitably the studies of the Junior Year, students should be well grounded in Modern Geography, the elements of English Grammar, and Arithmetic through Decimal Fractions. A much greater proficiency in English studies is found to be of great advantage.

The completion of the course of study prepares the student for any college. It is of the greatest advantage that the student enter the department at the beginning of the course. Emphasis is laid on the requirements in Latin Grammar and Composition, and Greek Grammar and Composition; past experience shows that the candidate is liable to overestimate his attainments in these subjects. General information must not be regarded as an equivalent for technical scholarship; nor mere translation for systematic drill in the forms and usages of language.

Examinations, conducted in writing, are held in each study once, at least, in each term; and near the close of the year with reference to promotion and graduation. Promotion and graduation are secured only by those who give satisfactory evidence of the requisite proficiency.

Junior Year.—First Term.

English : Grammar and Analysis.

Latin : Grammar and Lessons.

Mathematics : Arithmetic.

English : * Spelling, Punctuation, Dictation, and Declamations.

*Lessons in the Bible and English, weekly, throughout the course.

Second Term.

English : Grammar and Analysis completed.

Latin : Grammar and Lessons. Selections from Cæsar. Exercises in Writing.

Mathematics : Arithmetic completed, including the Metric System.

English : Spelling, Development of Simple Themes, and Declamations.

Third Term.

History : History and Geography of the United States.

Latin : Cæsar. Exercises in Writing.

Government : Civil Government of the United States, with special reference to Michigan.

English : Spelling, Essays, and Declamations.

Middle Year—First Term.

Latin : Cicero—Selections. Exercises in Writing. Reading at sight.

Greek : Grammar and Lessons.

Mathematics : Algebra.

English : Essays, Written Discussions, and Declamations. Drill in Elocution.

Second Term.

Latin : Cicero. Exercises in Composition. Reading at sight.

Greek : Grammar and Lessons.

Mathematics : Algebra through Quadratic Equations.

English : Essays, Discussions, and Declamations. Drill in Elocution.

Third Term.

Latin : Cicero. Exercises in Composition. Reading at sight.

Greek : Grammar and Lessons. Xenophon—Coy's First Reader, forty pages.

Mathematics : Geometry (Plane).

English : Essays, Discussions, and Declamations. Drill in Elocution.

Senior Year—First Term.

Latin : Virgil. Exercises in Composition. Reading at sight.

Greek : Review of the Lessons. Xenophon—Coy's First Reader completed. Anabasis, Books I, II. Reading at sight. Composition.

History (8 h.): Roman History and Geography.

English : Essays, Discussions, and Declamations. Drill in Elocution.

Second Term.

Latin : Virgil. Composition (Poetry into Prose). Reading at sight.

Greek : Xenophon—Anabasis, Books III, IV. Herodotus—Selections. Reading at sight. Composition.

History (8 h.): Greek History and Geography.

English : Essays, Discussions, Declamations, and Orations. Drill in Elocution.

Third Term.

Latin : Virgil. Reading at sight. Reviews.

Greek : Homer—Iliad, two books. Selections from Attic Prose. Reading at sight. Reviews.

English : A Thesis for Graduation.

SCIENTIFIC AND LITERARY COURSE.

Junior Year—First Term.

English : Grammar and Analysis. Penmanship.

Mathematics : Arithmetic.

Geography : Political Geography.

English : * Spelling, Punctuation, Dictation, and Declamations.

Second Term.

English : Grammar and Analysis completed.

Mathematics : Arithmetic completed, including the Metric System, and Book-keeping.

English : Spelling, Development of Simple Themes, and Declamations.

Third Term.

History : History and Geography of the United States.

Government : Civil Government of the United States, with special reference to Michigan.

Drawing : Free-Hand and Geometrical Drawing.

English : Spelling, Essays, and Declamations.

Senior Year—First Term.

Latin : Grammar and Lessons.

Mathematics : Algebra.

Natural Science : Physical Geography.

English : Essays, Written Discussions, and Declamations. Drill in Elocution.

Second Term.

Latin : Grammar and Lessons. Selections from Cæsar. Exercises in Writing.

Mathematics : Algebra through Quadratic Equations.

Physics : Natural Philosophy (Elementary).

English : Essays, Discussions, and Declamations. Drill in Elocution.

Third Term.

Latin : Cæsar. Exercises in Writing.

Mathematics : Geometry (Plane).

Natural Science : Physiology and Hygiene (Elementary).

English : Essays, Discussions, and Declamations. Drill in Elocution.

All candidates for advanced standing in these courses are examined in studies already pursued by the class they propose to enter.

ENGLISH COURSE.

The course of instruction in this department is designed to impart a thorough knowledge of the common and higher branches of an English education. Students are prepared for the best scientific schools, by substituting Latin or French, as required, for equivalent studies. Students who

*Lessons in the Bible and English, weekly, throughout the course.

honorably complete the first three years may receive a certificate for presentation to scientific schools. The preparation required for admission is indicated by the "Course of Study" following. The studies of the third and fourth years are not pursued as elementary studies.

The College is provided with apparatus for illustrating the principles of Natural Philosophy and Astronomy, and instruction is given in its use. It has also a valuable set of instruments for Practical Surveying and Civil Engineering. The Laboratory is fitted with desks and apparatus for practical work by the students, both in General Chemistry and in Chemical Analysis.

First Year—First Term.

English Grammar. Arithmetic. Geography. Penmanship. * English—Spelling, Punctuation, Dictation, and Declamations.

Second Term.

English Grammar and Analysis. Arithmetic. Book-keeping. English—Spelling, Development of Simple Themes, and Declamations.

Third Term.

History of the United States. Civil Government. Drawing. English—Spelling, Essays, and Declamations.

Second Year—First Term.

Physical Geography. Rhetoric. Algebra. English—Essays, Written Discussions, Declamations, and Drill in Elocution.

Second Term.

Natural Philosophy. Zoölogy. Algebra. Vocal Music. English—Essays, Discussions, Declamations, and Drill in Elocution.

Third Term.

Geometry. Physiology. Botany. English—Essays, Discussions, Declamations, and Drill in Elocution.

Third Year—First Term.

Algebra. Botany. Chemistry. English—Essays, Discussions, Declamations, and Drill in Elocution.

Second Term.

Geometry. English Literature. * *Chemistry*. *Anatomy and Physiology*. English—Essays, Discussions, Declamations, Orations, and Drill in Elocution.

Third Term.

Logic. *Trigonometry*. *Chemistry*. *Advanced Methods*. English—Essays, Discussions, Declamations, Orations, and Drill in Elocution.

Fourth Year—First Term.

Analytical Geometry. *History*. *Geology*. *Mental Philosophy*. *French*. *German*.

* Lessons in the Bible, and English or Oratory, weekly, throughout the course.
 † The subjects printed in italics are elective.

Oratory—Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Second Term.

History. Geology. Mental Philosophy. Political Economy. French. German. Oratory—Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Third Term.

Astronomy. History. Art. Surveying. French. German. Oratory—Essays, Discussions, Declamations, and Elocution.

NORMAL COURSES.

ENGLISH COURSE.

First Year—First Term.

English Grammar. Arithmetic. Geography. Penmanship. Methods—Elementary Sounds, Primary Reading, and Language Lessons. * English—Spelling, Punctuation, Dictation, and Declamations.

Second Term.

English Grammar and Analysis. Arithmetic. Book-keeping. English—Spelling, Development of Simple Themes, and Declamations.

Third Term.

History of the United States. Civil Government. Drawing. English—Spelling, Essays, and Declamation.

Second Year—First Term.

Algebra. Physical Geography. Rhetoric. Methods—Class Work. English—Essays, Written Discussions, Declamations, and Drill in Elocution.

Second Term.

Algebra. Natural Philosophy. Zoölogy. Vocal Music. English—Essays, Discussions, Declamations, and Drill in Elocution.

Third Term.

Geometry. Physiology. Botany. English—Essays, Discussions, Declamations, and Drill in Elocution.

Third Year—First Term.

Algebra. Methods—School Organization, Grading, and Management. + *Chemistry. German. Latin.* English—Essays, Discussions, Declamations, and Drill in Elocution.

Second Term.

Geometry. Chemistry. English Literature. German. Latin. English—Essays, Discussions, Declamations, and Drill in Elocution.

* Lessons in the Bible and English, weekly, throughout the course.

† The subjects printed in italics are elective.

Third Term.

Logic. German. Latin. Chemistry. Methods—Development of the Human Faculties; Organization, Grading and Management of Schools, and History of Education. English—Essays, Discussions, Declamations, and Drill in Elocution.

LANGUAGE COURSE.

First Year—First Term.

English Grammar. Arithmetic. Geography. Penmanship. Methods—Elementary Sounds, Primary Reading, and Language Lessons. * English—Spelling, Punctuation, Dictation, and Declamations.

Second Term.

English. Grammar and Analysis. Arithmetic. Book-keeping. English—Spelling, Development of Simple Themes, and Declamations.

Third Term.

History of the United States. Civil Government. Drawing. English—Spelling, Essays, and Declamations.

Second Year—First Term.

Algebra. Latin. Methods—Class Work. English—Essays, Written Discussions, Declamations, and Drill in Elocution.

Second Term.

Algebra. Latin. Vocal Music. English—Essays, Discussions, Declamations, and Drill in Elocution.

Third Term.

Geometry. Physiology. Latin. English—Essays, Discussions, Declamations, and Drill in Elocution.

Third Year—First Term.

Algebra. Methods—School Organization, Grading, and Management. † *Latin. French. Greek. German.* English—Essays, Discussions, Declamations, and Drill in Elocution.

Second Term.

Geometry. *Latin. French. Greek. German.* English—Essays, Discussions, Declamations, Orations, and Drill in Elocution.

Third Term.

Botany. *Latin. French. Greek. German.* English—Essays, Discussions, Declamations, Orations, and Drill in Elocution.

Fourth Year—First Term.

Latin. Greek. Roman History. Geology. Rhetoric. Mental Philosophy. Oratory—Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

* Lessons in the Bible, and English or Oratory, weekly, throughout the course.

† The subjects printed in italics are elective.

Second Term.

Latin. Greek. Greek History. Chemistry. English Literature. Mental Philosophy. Oratory—Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

Third Term.

Latin. Greek. Art. Chemistry. Moral Philosophy. Methods—Development of the Human Faculties; Organization, Grading, and Management of Schools, and History of Education. Oratory—Lectures on Composition and Style. Essays, Discussions, Orations, and Elocution.

CHANGES IN THE FACULTY.

Prof. J. F. Loba, who at the close of the preceding year had resigned the professorship of Rhetoric and Modern Languages, was succeeded by Edwin F. Norton, A. M., a graduate of Yale in the class of 1885. Henry D. Wild, A. B., an alumnus of Williams, class of 1888, filled the chair of English, Penmanship, and Book-keeping. Miss Catherine E. Hutchings, A. B., was succeeded by Mrs. Aurelia Burrage, of Gardner, Mass., as Principal of the Ladies' Department. Miss Alice M. Warren was succeeded by Miss M. Ida Swindt as Instructor in Mathematics.

THE OLIVET CONSERVATORY OF MUSIC

Continued to be under the care of Prof. H. W. Dubee as Director, assisted by Miss Anna B. Shepard, Instructor in Vocal Music, and Miss Nellie I. Herrick, teacher of the Piano and the Organ. It fully sustained the high reputation it had previously gained. The Musical Guild flourished. Its members met once a week. Essays on musical themes, biographical sketches of eminent composers, notes on current events in the world of music and the performance of selections for voices and instruments filled the programme.

COURSE OF INSTRUCTION.

The Conservatory offers the finest advantages for the study of Music—Instrumental, Vocal, and Theoretical—either exclusively or with other studies. The methods of instruction are similar to those of the best Conservatories in this country and Europe. The course of study is comprehensive and thorough, being arranged with a view to maintain a high standard of musical taste. The aim of the management is to secure a complete mastery of all branches which are undertaken by the student, rather than to give a superficial knowledge of a few pieces. A real education of the musical faculties is accomplished, rather than a training in styles which are to be blindly imitated by the pupil.

THE PIANO-FORTE.

In the study of this instrument, great attention is given to every detail of Technique. Especial care is taken to develop a truly musical touch and an expressive style of playing.

The following is an outline of the studies pursued, the teacher selecting those which may be most profitably used by the pupil. Four years is the time usually needed for its completion, but this will depend wholly upon the capacity and progress of the individual.

First Year—First Term.

Beyer's Preliminary School; Knorr's Guide for the Pianist; Lebert and Stark's Method; or Wohlfahrt's Young Pianist's Guide. Plaidy's Technical Studies; Studies in Position, Tension, Motion, and Touch; Exercises for forming the hand; Single and Two-finger Exercises; Five-finger Exercises; Transposition to Key of D; Scales of C, G, and D. Analysis and Synthesis—rhythmic, melodic, and harmonic. Reviews, oral and technical.

Second Term.

Beyer's School completed; or Knorr's Guide through 50th page; or Wohlfahrt's Guide completed. Plaidy's Technical Studies; Five-note Exercises; Major Scales completed. Analysis throughout the course. Three pieces—one a Sonatina by Beethoven, Diabelli, Lichner, or Spindler. Memorizing.

Third Term.

Knorr's Guide completed; or Bertini, Op. 100; or Concone's Etudes Melodiques; or Heller, Op. 47. Two-part Canons, by Kunz. Loeschhorn, Op. 65, Bk. 1. Five-note Exercises (Plaidy). Minor Scales and Scale Review. Playing from Memory. Reading at Sight from Diabelli's Melodious Exercises. Pieces.

Second Year—First Term.

Bach, Little Preludes; Wollenhaupt, Etudes; or Heller, Op. 47, Bk. 2; or Czerny, Op. 139, No. 3; or Loeschhorn, Op. 65. Sonatas by Kuhlau. Moving Figures, or Chords and Major Arpeggios (Plaidy). Action of Hand and of Arm; Tone; Accent; Expression; Memorizing. Reading of Vocal Score. Fingering of Church Music. Use of Metronome. Three pieces. Sight Reading. Playing in General Exercises.

Second Term.

Bertini, Op. 29; or Heller, Op. 46; or Bach's Inventions. Loeschhorn, Op. 66, Bk. 1. Moving figures completed, or Minor Chords and Arpeggios (Plaidy). Tone in Chord Playing. Phrasing. Sonatas by Clementi and Haydn. Mendelssohn's Songs without words. Six pieces. Sight Reading from Mozart's Four-hand Sonatas. Reading of Motets, Glee, etc. Memorizing, two pieces.

Third Term.

Bertini, Op. 32; or Heller, Op. 45; or Koehler, Op. 128; or Aloys Schmidt, Op. 16, Loeschhorn, Op. 66, Bk. 2. Czerny, Op. 848. Bach's Inventions. Arpeggios or Moving Figures. Scale Review for higher Velocity and Power. Reading of Score in Oratorio Choruses. Song accompaniments throughout the course. Four pieces—two memorized; Sonatas of Mozart. Preludes from the Well-Tempered Clavichord of Bach.

Third Year—First Term.

Tausig's Daily Studies. Cramer's Etudes, or Heller, Op. 16 or 81; or Czerny, Op. 740, Nos. 1 and 2; or Jensen, Op. 32; or Behrens, Op. 22; or Rosenhain; Bach's Pre-

ludes ; Czerny, Op. 337, Bk. 1, 10 studies ; Loeschhorn's School of Velocity. Dominant Seventh Arpeggios, Arpeggio Review, Arpeggio Moving Figures. Reading Oratorio Choruses. Study of Transpositions. Six pieces. Sonatas by Beethoven and Mozart. For Sight Reading, Haydn's Symphonies. Concert Playing.

Second Term.

Clementi, Gradus ad Parnassum (Tausig and Littolff); or Moscheles, Op. 70, Book 1 ; or Loeschhorn's Op. 67. Bach's 48 Preludes and Fugues ; Czerny, Op. 337, Bk. 1, completed. Second Scale Review. Scales in Double Tones. Kullak's Octave School begun. Study of Transposition continued (Cramer's Etudes or Bach's Preludes). Reading of Mozart's Symphonies and Overtures. Sonatas by Beethoven, Schubert, Weber, and Hummel. Fantasies, Waltzes, etc., by Mendelssohn, Schumann, Chopin, and others.

Third Term.

Chopin, Op. 10 ; or Clementi's Gradus completed ; or Moscheles, Op. 70, Bk. 2. Bach's 48 Preludes and Fugues. Study of Improvisation. Reading of Beethoven's Symphonies and Overtures, and Kullak's Octave School, Bks. 1 and 2. Third Scale Review. Sonatas by Beethoven, Schubert, and Weber. Nocturnes, Fantasies, and Impromptus by Schumann, Chopin, and Schubert. Suites by Bach and Handel.

Fourth Year.

Those preparing to teach may here substitute the Normal Course for certain other studies at the beginning of this year ; they must, however, first have passed a satisfactory examination in the studies of the preceeding three years, showing good attainments in technique as well as general knowledge of music.

First Term.

Chopin, Op. 25 ; or Henselt, Op. 2 or Op. 5 ; or Moscheles, Op. 95. Fourth Scale Review. Concertos of Mendelssohn, Beethoven, and Bach. Rhapsodies of Liszt. For general reading, Scarlatti, Bach and Handel. Essays on Music. Chorus accompaniment.

Second Term.

Liszt, Grand Etudes de Paganini ; or Schumann, Op. 8 ; or Rubinstein's Etudes. Classification of Works. General Analytic and Synthetic Review.

Third Term.

Concert Playing of selected pieces. Chamber and Concerted Music, with orchestra, etc. Reading and Analysis of new publications for study of the elements of Musical Criticism.

A series of Piano Recitals will be given every year by the Director.

THE ORGAN.

A very complete Pipe Organ of two manuals, and two and a quarter octaves of pedals, furnishes an opportunity for practice such as is rarely to be obtained at any price, even in the largest cities. In the lessons in Organ playing, particular attention is given to the study of obligato pedal

playing, Registration, Church Service in all forms, Choir Accompaniment, and Concert Music, with special attention to the works of Bach and Mendelssohn. Pupils, when advanced, are afforded practical experience in accompanying the Choir in Chorus and Quartette.

Text-books and other works which are used in this Course are as follows:

Ritter's and Rink's Organ Schools; Thayer's Pedal Technics; Studies in Pedal Phrasing by Dudley Buck; Schneider's Pedal Studies; Bach's Preludes, Fugues and Toccatas; Bach's, Mendelssohn's and Merkel's Sonatas; Handel's Concertos, and, for practice in free-style playing, selections from works by Guilmant, Batiste, Lemmens, etc.

A series of Organ Recitals is given every year by the Director. The selections embrace a wide range of the finest compositions for the Organ.

THEORY OF MUSIC AND COMPOSITION.

This study should be undertaken as early as possible, as by a knowledge of it much time may be saved in the practice of Vocal and Instrumental Music. A practical application of each principle is made immediately upon its presentation. Theory thus becomes of great value to the student in subsequent study, a knowledge of it insuring facility in reading at sight. The course of study requires three years.

The text-books used are Emery's "Elements of Harmony," Richter's "Harmony," Richter's "Treatise on Counterpoint," and Berlioz's "Instrumentation."

History of Music.

A series of lectures on this subject will be given every year by the Director. The text-book used is the "History of Music," by Langhaus.

Cultivation of the Voice.

The instruction in Voice Culture embraces careful training in the control of the breath, and the use of the vocal organs for the production of a pure tone and distinct enunciation.

Voices are not strained or abnormally developed, but cultivated and expanded in accordance with their natural capacities. Hence the progress is rapid and thorough. Great attention is given to singing at sight.

Vocalises by Panofka, Concone, and others, together with songs, ballads, opera and oratorio selections, are used for the formation of method and cultivation of style.

Cabinet Organ.

In the study of this instrument, pupils are instructed in playing Church Music, Voluntaries, etc., great care being taken not only that the pupil shall be familiar with all the resources of the instrument, but also, having completed the course of study, shall be fully prepared to undertake the study of the Pipe Organ.

Concerts and Students' Rehearsals.

The following are the several courses of concerts which have been instituted: Organ Recitals, Piano Recitals, and Exhibition Concerts.

The two former courses afford pupils opportunity for becoming acquainted with many of the finest works of musical art. The exhibition concerts occur at the close of the term, and are intended mainly to show the progress and proficiency of the pupils. They are of a high order and have received great praise from those well qualified to judge. Students' rehearsals take place every Friday afternoon, at which time pupils perform vocal and instrumental selections. These rehearsals are of great value to the student, as they afford an opportunity of playing before others. All the friends and pupils of the Conservatory are invited to attend.

The Glee Class and Choir afford ample opportunity for chorus singing. The Normal and College singing classes meet twice a week, and are free to all students.

LITERARY REQUIREMENTS.

1. Candidates for graduation are required to pass examination in the following studies, or their equivalents: Algebra, to the amount of two terms' work in the College; German, three terms; French, two terms; Rhetoric, one term; Acoustics, Art, English Literature, one term; and Evidences of Christianity. They are also required to attend Rhetorical Classes during their course in the Conservatory.

2. Transient students in the Conservatory are recommended to elect one study each term in one of the College courses.

3. Free tuition is granted in *one study* each term, in any of the College courses, to every musical student who takes two regular studies in the Conservatory.

THE COURSE IN ART

leads to advance work in the same line, and affords excellent preparation for certain scientific studies.

It is the object of this department to develop in the student's mind a correct idea of form, as well as an appreciation of the beautiful; also to train the powers of observation until the students are capable of working independently from life and sketching from nature.

A thorough understanding of the principles of drawing is followed by the study of form from simple models and casts, afterwards studies in still life, sketching from nature, and the study of the human form. The following will give an idea of the work pursued:

Pencil Drawing is free to all students for one term of twenty-four lessons. This comprises the fundamental principles of drawing, working from the flat, followed by the study of form or extension, from simple objects, models and casts.

Mechanical Drawing is free to all students for one term of twenty-four lessons.

Charcoal Drawing includes drawing from the cast and still life studies. A good assortment of casts of leaves, fruit, fragments of the human form, etc., has been provided for this work.

Crayon Drawing—Finished pictures and crayon portraits.

China Painting embraces the decorating of porcelain, vases, tiles, etc., in mineral colors. Gilding is also done. A portable kiln has been provided for the firing of porcelain.

Oil and Water Colors—Studies in still life, landscapes, flowers, figures, etc.

Students wishing to make Art a specialty can have instruction and the use of the art room and models, daily.

A term's work comprises twenty-four lessons, each two hours long. This department has been under the care of Mrs. Ella M. Kedzie, A. B., for several years, and its reputation is steadily increasing.

THE NATURAL SCIENCES.

During the last few years the College has greatly enriched itself in facilities for scientific pursuits. The Chemical Laboratory is furnished with all modern appliances. The Palmer Museum furnishes a set of Ward's casts of fossil forms. The Brown Cabinet is rich in hundreds of fossils, ten thousand shells, and thirty thousand minerals. It has been said by one competent to judge, that in facilities for teaching chemistry and physiology, botany and zoölogy, geology and mineralogy, but two institutions in the West outrank Olivet College.

As a natural result, the study of these sciences has recently received a strong impulse. They have been generously digested into the courses, and receive high consideration from teachers and students. Original investigation is encouraged and undertaken, and a true scientific zeal has been kindled.

OTHER STUDIES.

Nevertheless, the Classics are pursued with undiminished vigor. At no time in the history of the institution has the study of Latin and Greek been more popular. Mathematics, mental and moral philosophy, political economy, English literature, and the evidences of Christianity,—none of these studies languish. An appreciation of the worth of all the studies in the courses is to be seen in professors and students.

Especially to be noticed is the revival in the pursuit of English, along the whole line of rhetorical studies. A broader and more solid foundation is laid in the Preparatory Department, and the corresponding structure steadily rises to completion in the College. Great care is taken thoroughly to institute the student in this work in the earlier years of his course. The aim is to minimize the number of those students, some of whom are to be found in every college, who come to graduation versed in the ancient and modern languages, disciplined in mental and moral philosophy, and strong in mathematics and the natural sciences, yet sure to be put to shame in their use of English. Our three literary societies are efficiently aiding in this good work.

THE SOCIETIES.

Our literary societies are three. "The Soronian" is for the young ladies. It is efficiently conducted and in a flourishing condition. "The Adelpic" and "The Phi Alpha Pi" are for the young men. All these societies are doing admirable work. They are not associations for mere pleasure or good fellowship. They arouse ambition for excellence in writing and speaking, and prescribe thorough work.

The two societies for young men have shown wisdom, energy, and no little self-sacrifice in planning and preparing to build halls for their permanent homes.

THE ADELPHIC SOCIETY BUILDING.

"This is monumental in style, built of broken, rough-faced field stone in natural outline, with the second and third stories of the tower and front gable finished in California red-wood shingles. A portico 6x25 feet, with tile floor, leads into an ample hallway with stairway and cloak-rooms on the right, and on the left a circular reception room containing an open fire-place and lighted by four large windows.

"Sliding doors open from this room and the hallway into the auditorium—a room 24x40 feet—lighted by four large stained-glass windows. The finish of this room, as well as that of the interior of the whole building, is in antique oak. The ceiling is panelled oak, fifteen feet high on the sides and twenty-four feet in the center. Ascending the stairway, an ample landing leads into a reception room 25x38 feet, with cloak-rooms adjoining. This room also contains an open fire-place. Sliding doors open the room into a gallery commanding a view of the entire auditorium.

"The third floor of the tower contains two janitor's rooms. The basement contains one large room under the auditorium, and furnace-room, closets, etc., under reception-room and hallway. The material and workmanship of the entire building is of the finest quality.

"Among the many hand-carvings might be mentioned the large dragon fixed to the summit of the front gable, bearing the motto of the Adelpthic Society, *Semper Fidelis*. This building is nearly completed, and will cost \$10,000."

The society expects to dedicate its hall next Commencement.

THE PHI ALPHA PI BUILDING.

"Much of the material for this building is already on the ground, and the corner stone will be laid next Commencement. When finished it will cost about \$12,000. This building is to be of the combined Greek and Swiss style of architecture. The foundation is of the darker field-stone broken with an irregular face, and laid in cyclopean style. This is capped by a belt of Lake Superior red sandstone, which in turn supports the upper wall made of the finest shades of field granites laid in irregular courses of broken Ashler, and divided above the first story windows by a broad belt, lintel course. The gables and roof are finished with red Spanish tile. The front of the building is adorned by a large Greek portico, the columns of which are of polished red granite.

"A massive stone arch spans the entrance to the vestibule, which leads into a reception hall 22x23 feet. Opposite the entrance is an open fire-place, on each side of which are large skeleton doors opening into the auditorium, 34x34 feet and 25 feet high. At the left of the auditorium are three panelled oak doors, which may be dropped flush with the floor, thus adding to the main audience room a committee room 18x24 feet when needed. Connected with the reception hall on the left is a parlor 21x21 feet, finished with an open fire-place and lighted by four plate-glass windows.

Adjoining the parlor is a library, which is also accessible from the committee room.

"To the right of the parlor is the stairway leading from the reception room to the second floor. This floor is used for guest chamber, janitor's room and kitchen.

"In the basement are toilet and bath rooms.

"The building is trimmed inside with white oak; the ceilings are all panelled, and the floors are of polished maple except that of the vestibule, which is of white marble."

The erection of these two halls has a tonic effect upon the whole academic family. Its influence is felt far and wide, and is binding alumni and former students more closely to the College. These show their good will in generous contributions. The halls will be ornaments to the campus.

THE GYMNASIUM.

Olivet College, at last, is to have ample means of physical culture. This has long been "a consummation devoutly to be wished." As Colonial Hall was to be removed, it was seen to possess all the conditions essential to a good gymnasium. A friend of the College offered to give five hundred dollars, provided this building should be enlarged and remodeled before Commencement. The offer was accepted and the conditions were fulfilled. At this writing, the gymnasium is in successful operation. The general supervision of the work belongs to Prof. H. D. Wild, who directs the young men. The young ladies are under the direction of Miss H. G. McDougal.

BURRAGE HALL AND THE LIBRARY.

The library contains about 17,000 volumes and nearly as many pamphlets. From its old home in Parsons Hall, where it has been so long exposed to danger from fire, it is soon to migrate, and find a permanent abode in "Burrage Hall." The corner stone of this building was laid last Commencement with appropriate services. It bears the honored name of the late CAPT. LEONARD BURRAGE, of North Leominster, Mass., who bequeathed the College twenty thousand dollars. To this a friend added five thousand dollars, and the enterprise was assured. The building will cost about twenty-eight thousand dollars. It will be dedicated next Commencement. It is of the Romanesque style of architecture, 110 feet in length by 52 in breadth, and has a capacity for over 100,000 volumes. The foundation walls are of field stone, massive and solid, and impress the beholder as the happy combination of strength and beauty. The superstructure is of Ionia sandstone, warmer in its colors and more graceful under the touches of art. The first floor contains the delivery room, 36x22; reading room, 32x22; librarian's room, 12x10; and stack room, 50x35. The latter is fire-proof, and will contain about 50,000 volumes. The basement beneath the stack room, and the roof-room above, will together contain about 40,000 volumes; the other rooms at least 10,000 more. In the second story is the cataloguer's room, of the same dimensions as the librarian's room, and immediately above it. Also two rooms for books of reference and special study. These are respectively 81x21 and 18x15.

No pains have been spared in the construction of this building, and when finished it will be one of the most elegant and complete in all its appointments of any library in the State. It is literally fire-proof in the stack room, and practically so throughout. It therefore furnishes a safe repository for our valuable and growing library. In its design it provides for three important things: Economy and convenience in its working arrangements; attractive, well-furnished and well-lighted rooms for its readers; and the possibility of enlargement at moderate expense and without change of original plan."

The Assistant Treasurer, Geo. W. Keyes, Esq., will send you his financial statement. In conclusion, I would say that the year covered by this report has been a prosperous one, and that at no previous time in its history have the friends of the College been more hopeful as to its future.

Very respectfully yours,

HORATIO Q. BUTTERFIELD,
President.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction.

DEAR SIR—We, the undersigned members of a committee appointed to visit Olivet College, make the following report:

1. We find that the courses of instruction are very thorough and complete, and in many respects equal to those of the best institutions in the country.

2. Conditions are such that the students are continually brought into close contact with the members of the faculty, and this operates as an elevating moral influence and has a tendency to secure correct deportment on the part of the students, who apparently take a deep interest in this matter.

3. The moral tendencies of the village are of the very best. There is not a saloon in the place, and such a strong sentiment prevails against the use of intoxicants, among students and citizens alike, that it has become impossible for those who might be so disposed to establish one. In addition to this the prohibition of the use of tobacco by students works to their advantage.

4. The most excellent arrangement of the various specimens in the museum by Prof. Bumpus is worthy of special mention. In all probability there are very few museums in the country that are so arranged as to become so useful to students of the different stages of development of animal life and of natural history.

5. The various works of the library have been carefully selected and arranged in such a manner as to bring students in contact with the best minds of the age. A new fire-proof library building is in process of construction, and when completed the college will have a valuable aid for the literary training of her students.

6. An excellent gymnasium has been fitted with modern appliances for the physical training and general exercise of students. This is sure to become a valuable auxiliary to the college training of students.

7. Steps have been taken to establish a Theological Department for such of the students as desire to take advantage of such training. To this end two chairs have been endowed, and the course for this work will be immediately established.

8. We note with pleasure the originality and vigor of thought evidenced by students who took part in the graduating exercises, both in the preparatory and college courses. It occurs to us that this is indicative of excellent work performed in the institution in training students in channels of modern thought and practical ideas.

Very respectfully submitted,

HARVEY TAPPAN,

MARY E. TILTON,

H. F. TYLER,

Board of Visitors.

In addition to the above, I wish to say that I was particularly pleased with the relations between the students of the ladies' department and the preceptress. Each one was inclined to do right because it was right, not because of certain rules.

The Art Department was poorly provided for in point of room and light.

I also noticed that the forms for illustrating subjects in physiology were imperfect and left wrong impressions upon the student's mind.

Respectfully,

MARY E. TILTON.

RAISIN VALLEY SEMINARY.

REPORT OF THE PRINCIPAL.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction.

DEAR SIR—During the year the school was under the management of Principal F. R. Hathaway, assisted by Marietta Parker and T. Wm. White as associate teachers, and Wm. K. Green and Edna Green as superintendent and matron. The school year consisted of forty weeks, divided into three terms, as follows: Fall term, sixteen weeks; winter term, twelve weeks; spring term, twelve weeks. During the fall term there were seventy-two students enrolled, the winter term seventy, spring term forty-four. This is about the usual enrollment for the past five years. About one-half the students room in dormitories, the remainder are day students. The sexes are about evenly divided. Average daily attendance, ninety-five per cent. of the enrollment. The graduating class numbered eight, four boys and four girls. Half the class took the Latin course, the remainder the English. Several members of the class of '89 are teaching, others are attending school. The Alumni of the school now numbers ninety-five. During the year some valuable additions were made to the physical laboratory and library. Many improvements were also made in the buildings and surroundings. The financial condition of the school is good. For the past few years the Seminary has paid running expenses; this year has been no exception to the rule. The management of the school has been without friction and few cases of discipline arose. A spirit of earnest study characterized the great majority of students and good progress was made in intellectual work. Much spiritual life was manifested by pupils, resulting in a healthy moral growth. Viewed from any standpoint, the fortieth year at Raisin Valley Seminary has been a most prosperous one.

F. R. HATHAWAY,
Principal.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction.

DEAR SIR—In accordance with your appointment we have visited Raisin Valley Seminary, and, pursuant with the usual custom, we tender you the following report:

The spirit under which the school is managed is commendable, and the theory according to which the work is carried on is abreast with the educational thought of the times.

The school has been put on a better basis with the University during the present year, by the admission of its pupils to the course of Bachelor of Letters without examination.

The instructors feel the need of more apparatus for illustration in the department of science. The supporters of the school should appreciate the fact that the department is crippled by a lack of the necessities for the successful presentation of scientific studies.

There is a tendency on the part of the instructors to attempt to do too much of the work themselves, and require too little mental activity on the part of the pupils.

Under the present management, however, there is every prospect that the institution will grow in usefulness as time gives opportunity for the development of its policy.

Very respectfully,

G. A. OSINGA,

IDA L. WALL,

IDA A. LAMB,

State Board of Visitors.

SPRING ARBOR SEMINARY.

REPORT OF THE BOARD OF VISITORS.

HON. JOSEPH ESTABROOK,
Superintendent of Public Instruction.

DEAR SIR—As chairman of the committee appointed by you to visit Spring Arbor Seminary, I performed that duty in the early part of last May. I spent one day in visiting the classes and observing the every-day work performed. I have no knowledge that the other members of the committee visited the school, and in consequence this report is based upon my own observations and notes.

The number of pupils enrolled during the year was 127, about half of whom were boys. Three graduated in June; and the whole number of graduates from this school since it came under its present management is 40.

The school has three departments, Primary, Intermediate and Academic, and in the latter there are three courses of study, Scientific, Latin and Classical. The course of study in the academic department is nearly the same as in most of our high schools, and the length of time required to take the work of all departments and graduate is about twelve years. During a portion of each year special instruction is now given in vocal music, penmanship and bookkeeping.

A tuition fee is charged those who receive instruction, and this, with the amount received for room and board from the thirty students that live in the Hall, constitutes the fund for the entire support of the school.

The school is under the patronage of the Free Methodists of Michigan and Canada. Sectarianism is not taught, but a strong religious and moral influence is thrown around those in attendance. As there are no public schools in the village most of the children in the locality are educated at the Seminary.

The whole value of the property is estimated at \$15,000. It was secured from the Baptists a number of years ago, and has since undergone some improvements.

The school is under the management of Rev. A. H. Stilwell as principal, with Rev. O. P. Tiffeny as associate principal. These gentlemen seemed to be devoted to the cause in which they were engaged, and earnest, efficient work was being done in the schoolroom. Like many other chartered institutions of the State, the efficiency of this one is crippled by the lack of funds. The ability of those connected with the school and the character of the work performed are worthy of a more generous compensation and a more liberal patronage.

Very respectfully,

H. R. GASS,
Chairman Board of Visitors.

DECISIONS
OF THE
SUPREME COURT OF MICHIGAN
ON MATTERS OF
EDUCATIONAL INTEREST.

FILED DURING 1889.

SUPREME COURT DECISIONS.

I.

TERRITORIAL LIMITS OF DISTRICTS—ELECTION OF OFFICERS.

The People, ex rel. Peter Roeser et al. vs. Owen Gartland, Moderator et al.—Schools and school districts—Territorial limits of districts—Election of officers—Quo warranto.

CHAMPLIN, J.

An information in the nature of a quo warranto was filed against the respondents, requiring them to show by what authority school district No. 8, of Ingallston, in the county of Menominee, exercises the franchises of a school district, and the respondents held, used, and exercised the offices of the district respectively.

The school district in question is bounded on one side by Green bay, and by reason of the meandering nature of the shores of the same the sectional territory bound by it is largely fractional. The residents of the district are for the most part fishermen. They all reside on the shores of the bay, and on the fractional sections.

The district was formed by the board of school inspectors about April 12, 1888, and, as formed, contains five full and eight fractional sections of land, aggregating 5,707 acres, or 58 acres less than what is represented by nine sections of land.

Subsequent to the formation of the district, the clerk of the board of inspectors drew up and delivered to the respondent Louis Garbosky, an inhabitant of the district, the notice required by Howell's Statutes, section 5034, describing its boundaries, and fixing the house of the respondent Robert Beattie as the place, and the fifth day of May, 1888, as the time, for holding the first district meeting therein; which notice was served in due time and form upon every qualified voter in the district. At the time and place appointed for the first district meeting every qualified voter in the district appeared and participated, with one exception, the exception being the relator Peter Roeser. At this meeting, and by the vote of every qualified voter thereat, the respondents were elected to the offices which they now hold, and thereupon accepted and qualified. The vote, however, by which they were so elected, was *viva voce*, and not by ballot.

The notice drawn up by the clerk of the board of school inspectors, and delivered to Louis Garbosky, was not recorded by the clerk, nor was it or the return of service thereon recorded by the director as required by section 5034. The notice, with the return of service thereof, was present at the meeting, and in the hands of the chairman thereof, and was by him delivered to the director elected thereat, as required by law. The director pinned it in the record book of the district, but afterwards removed it therefrom, and handed it to the supervisor of the township, who lost it.

January 21, 1889, the information in this cause was exhibited and filed. The record presents three general questions :

1. May the relators proceed in this form, instead of by appeal to the township board?
2. Was the district lawfully formed?
3. If lawfully formed, was it lawfully organized?

1. We think the writ of *quo warranto* a proper remedy under the facts and circumstances of this case. The relators attack, not only the existence of the school district, but the right of the persons named to exercise the offices of moderator, assessor and director. These are questions which the township board could not deal with, being judicial in their nature.

2. We think the prohibition of the statute relative to the territory which may be included by the inspectors in the formation of a new district, refers to the extent of the territory, and was intended to allow them to include a quantity of land not exceeding nine full sections. The object of the statute is to allow the inspectors to embrace within the district sufficient land upon which taxes may be laid to support the schools, build school-houses, and defray the ordinary expenses, without being burdensome to the taxpayer; and also to bring the remotest residents of the district within such proximity of the school-houses as to enable their children to attend school.

Now, in the case before us, the eight fractional sections contain only 2,507 acres of land, and if another full section were added there would be 3,147 acres in the district; while in a district composed of nine full sections there would be 5,760 acres. It may very well happen that if the inspectors must be confined to the eight fractional and the one full section in marking the boundaries, the district so formed may not contain territory to enable the district to build a school-house or support a school without greatly and unjustly overburdening the taxpayers in the district.

Upon consideration of the whole subject, we construe the statute to authorize the inspectors to include in a school district contiguous territory not exceeding nine full sections of land according to the United States survey.

We think the school district was legally laid out and established by the board of school inspectors.

3. The provisions of law relative to the election of school district officers by ballot are mandatory, and must be observed. The respondents were not legally elected to the offices they assume to hold and exercise. It does not, however, follow that they should be ousted from their offices. There are no persons who claim to have been elected to these offices. The writ in this case is invoked, not in the interest of any private person, but in the interests of the public, and for public purposes. We should therefore exercise or refuse to exercise our power over the writ and proceedings in such manner as shall best promote the public interests.

These officers were chosen unanimously *viva voce* at a meeting regularly called. They have qualified and are acting as such. They are officers *de facto* and the public interest requires that they should not be disturbed.

We think that the judgment of the circuit court should be wholly reversed, and the writ dismissed. No costs will be allowed to either party.

The other justices concurred.

II.

RIGHT OF MARRIED WOMEN TO VOTE FOR SCHOOL OFFICERS.

Eva R. Belles v. William A. Burr, Salmon I. Beecher and John Algoe. Elections—Qualifications of voters—Right of women to vote for school district officers.

CHAMPLIN, J.

This action was brought against the defendants as inspectors of election of the third ward of the city of Flint, to recover damages for refusing to receive plaintiff's vote for the offices of trustees of the union school district of the city of Flint.

The agreed statement of facts is as follows :

"The plaintiff is a married woman residing in the third ward of the city of Flint, Genesee county, Michigan, and has resided there continuously for three years last past, and so resided there on the first Monday of April, A. D. 1888, and is 31 years of age.

"That she then was the owner of and had property liable for assessment for school taxes in said third ward of said city of Flint ; that she is the mother of Jennie Belles, a child of seven and one-half years of age, who resides with her, and did on said first day of April, and had always resided with her, in said ward, and which child was included in the school census of the school district composed of the entire city of Flint, aforesaid, and of which said third ward was a part.

"That for the election of city and ward officers in said city, held on said first day of April, 1888, said defendants acted as and were the inspectors of election in and for said third ward; that at said election there were to be voted for and elected for the sub-district composed of the third and fourth wards of said city, one school trustee for the full term, and one school trustee to fill a vacancy; that at said election in said ward said defendants as inspectors of election, had prepared and had a separate ballot-box to receive all ballots that might be offered at such election for trustees of said sub-district.

"That on said first Monday of April, at said election, said plaintiff, who resided in said third ward as aforesaid, offered and tendered her ballot to the said inspectors of election at the voting precinct in said third ward, for one school trustee for full term and one trustee to fill vacancy, to be then and there elected for the sub-district composed of said third and fourth wards of said city of Flint. Said ballot was a printed ticket containing the name and office of candidates for said full term and vacancy, and was separate from the ballot for all other city, ward or other offices. Plaintiff then and there offered to be sworn as to her qualifications as such voter, and as to her residence in said third ward. Said defendants, as such inspectors of election, refused to swear said plaintiff as to her qualifications as such voter, and refused to receive or count her said vote.

"That before deciding not to swear said plaintiff, or receive her vote, said inspectors of election took advice of reputable legal counselors, and were advised by them that women had no right to vote for such trustees; and that said defendants refused to receive the vote of said plaintiff, or to swear her as to her qualifications as a voter and her residence, in good faith relying on said legal counsel, and believing it to be correct, and believing that women had no right to vote for such school trustees.

"That the name of said district is the 'Union school district of the city of Flint,' and is composed of the entire city, and is organized under an act of the Legislature of the State of Michigan, being Act No. 316 of the Local Acts of 1877, as amended by Act No. 823 of the local acts of 1879, and Act No. 349 of the Local Acts of 1885. At said

election no question was involved or to be voted on which directly involved the raising of money by tax."

At the conclusion of the statement of facts, which was received as the evidence in the case, the defendants' counsel requested the court to charge as follows :

" Under the evidence in this case the plaintiff is not entitled to recover, and your verdict must be for the defendants."

The circuit judge refused to give the request, and instructed the jury to find a verdict for the plaintiff, which they did.

The law under which the city of Flint is organized is Act No. 316 of the Local Acts of Michigan for the year 1877, as amended by Act No. 323, Local Acts of 1879, and Act No. 349, Local Acts of 1885. Section one of this act provides that, in addition to the powers and privileges conferred by the act, the Union school district shall have all the powers and privileges, not inconsistent therewith, conferred upon school districts by the general laws of the State.

Further sections bearing upon the question read as follows :

" Sec. 3. The school board of said school district shall be constituted of nine trustees, three of whom shall be elected on the first Monday of April of each year, and hold their offices for the term of three years from the first Monday of May next following their election and until their successors shall have been elected and qualified.

" The term of office of the trustees of said Union school district heretofore elected on the first Monday of September, 1876, shall terminate on the first Monday of May, 1879; the term of office of the trustees elected on the second Monday of May, 1877, shall terminate on the first Monday of May, 1880; and the term of office of the trustees elected on the second Monday of May, 1878, shall terminate on the first Monday of May, 1881.

" Sec. 4. For the purpose of the election of trustees under this act, the said Union school district shall be divided into three sub-districts; the first to consist of that portion of said district lying north of Flint river, the second to consist of that portion of said district lying south of Flint river and east of Saginaw street, and the third to consist of that portion of said district lying south of Flint river and west of Saginaw street: *Provided*, That in said third subdistrict one of said trustees shall be and remain during his term of office a resident of the Fourth ward of the said city of Flint.

" The election of trustees shall be by ballot, and each qualified voter may vote in the ward in which he resides, and not elsewhere, for one person for the office of trustee from his subdistrict. Each trustee shall be a qualified and a resident of the subdistrict in which he shall be elected.

At least eight days before the election, notice thereof shall be given by the secretary in the official paper of the city, and, if any vacancy is to be filled, like notice thereof shall be given. The election shall be held at the same time and place, and conducted in the same manner, and by the same officers in each ward, as is provided by the charter for the election of ward officers.

" The inspectors of election in the several wards in the city are hereby required to prepare a separate ballot-box at each of the annual elections provided for in this act, to receive all ballots that may be offered at such election for trustees of said Union school district from the subdistrict in which the ward may be, and no other officer shall be voted for on such ballot.

" The said inspectors of election shall make the same canvass and public statement of votes given for trustee as for ward officers, and also a certificate of the number of

votes given for each person for the office of trustee, which shall be immediately filed in the office of the secretary of the board of trustees; and on the Wednesday next following such election the said board shall meet at the office of its secretary and ascertain the person who has received the greatest number of votes given for said office in each subdistrict, and declare him elected trustee therefrom of said Union school district for a term of three years from the first Monday of May then next ensuing; and immediately after such determination said secretary shall cause notice thereof to be given to the persons so elected.

When a vacancy in the office of trustee shall exist, it shall be filled by election at the same time and in the same manner as aforesaid, for the residue of the vacant term: *Provided*, That the voter shall express upon his ballot that the person voted for is to fill vacancy.

"Sec. 5. The qualifications of voters at such elections or at any school district meeting shall be such as are or shall hereafter be prescribed by the general school laws.

"If any person offering to vote at an election or school district meeting shall be challenged as unqualified by any legal voter, the presiding officer shall declare to the person challenged the qualifications of a voter; and if such person shall state that he is qualified, and the challenge shall not be withdrawn, the said president shall tender to him the oath in such cases prescribed in said general law; and every person taking said oath shall thereupon be permitted to vote.

"If any person so challenged shall refuse to take such oath, his vote shall be rejected; and any person who shall willfully take a false oath, or make a false affirmation, under the provisions of this section, shall be deemed guilty of perjury."

The qualification of voters under the general school law is prescribed by section 5049, Howell's Statutes, and is as follows:

"Every person of the age of 21 years, who has property liable to assessment for school taxes in any school district, and who has resided therein three months next preceding any school meeting held in said district, or who has resided three months next preceding such meeting on any territory belonging to such district at the time of holding said meeting, shall be a qualified voter in said meeting upon all questions; and all other persons who are 21 years of age, and are the parents or legal guardians of any children included in the school census of the district, and who have for three months, as aforesaid, been residents of said district, or upon any territory belonging thereto, at the time of holding any school meeting, shall be entitled to vote on all questions arising in said district which do not directly involve the raising of money by tax."

The oath prescribed in the general school law is found in section 5050, Howell's Statutes, and is as follows:

"You do swear (or affirm) that you are 21 years of age; that you have been for the last three months an actual resident of this school district, or residing upon territory now attached to this school district; and that you are the parent or legal guardian of one or more children now included in the school census of this district."

It is insisted by the counsel for the defendants—

"That under the Constitution of the State of Michigan the plaintiff had not a right to vote as demanded by her; that the Constitution limits the right to become an elector, and to being entitled to vote, to male citizens, and to male inhabitants, and that until the Constitution is amended by a vote of the people it is not within the power of the Legislature to make women electors and entitled to vote, even for school trustees."

The Constitutional provision referred to reads as follows:

"In all elections every male citizen ; every male inhabitant residing in the State on the twenty-fourth day of June, 1835 ; every male inhabitant residing in the State on the first day of January, 1850, who has declared his intention to become a citizen of the United States, pursuant to the laws thereof, six months preceeding an election, or who has resided in the State two years and six months, and declared his intention as aforesaid ; and every civilized male inhabitant of Indian descent, a native of the United States, and not a member of any tribe, shall be an elector and entitled to vote ; but no citizen or inhabitant shall be an elector or entitled to vote at any election unless he shall be above the age of twenty-one years, and has resided in this State three months, and in the township or ward in which he offers to vote, ten days next preceeding such election." Art. 7, § 1.

The Constitution under which we are now living, adopted in 1850, has a separate article, as did also the previous Constitution, entitled " Article 13. Education."

Sections 4 and 5 of this article read as follows:

"Sec. 4. The Legislature shall within five years from the adoption of this Constitution, provide for and establish a system of primary schools, whereby a school shall be kept, without charge or tuition, at least three months in each year, in every school district in the State ; and all instruction in said schools shall be conducted in the English language.

"Sec. 5. A school shall be maintained in each school district at least three months in each year. Any school district neglecting to maintain such school shall be deprived for the ensuing year of its proportion of the income of the primary school fund, and of all funds arising from taxes for the support of the schools."

A brief recapitulation of the provisions of the Constitution of 1835, and the legislation thereunder seems proper in order to arrive at the proper construction to be given to the provisions of the Constitution and legislation invoked by the defendants in justification of their action.

The right of suffrage was conferred by Article 2, § 1, of the Constitution under which Michigan was admitted as a State into the Union, as follows :

"In all elections every white male citizen above the age of 21 years, having resided in the State six months next preceeding any election, shall be entitled to vote at such election; and every white male inhabitant as of the age aforesaid, who may be a resident of this State at the time of the signing of the Constitution, shall have the right of voting as aforesaid."

Article 10, § 8, provided as follows :

"The legislature will provide for a system of common schools, by which a school shall be kept up and supported in each school district at least three months in every year; and any school district neglecting to keep up and support such a school may be deprived of its equal proportion of the interest of the public fund."

In the revised statutes of 1838 a system of primary schools was established, which provided for the formation of school districts. By section 4, chap. 8, title 11, it was enacted that—

"The qualified voters, when assembled pursuant to such previous notice, and also at each annual meeting, shall choose a moderator, director and assessor."

And section 5 prescribes the qualification of voters at such district meetings as follows:

"Sec. 5. Every white male inhabitant of the age of 21 years, residing in such district, liable to pay school district tax, shall be entitled to vote at any district meeting."

The revision of 1849 retained the same provision for the election of moderator, director and assessor, but the qualification of voters was changed so as to read as follows :

"Sec. 15. Every white male inhabitant of the age of 21 years, residing in the district, and liable to pay a school district tax therein, shall be entitled to vote at any district meeting; and all persons who are entitled by the laws of this State to vote at township and county elections, and residing in said district, shall be entitled to vote on all questions arising in said district excepting when the raising of money by tax is in question; and all such persons shall be eligible to any office in such school district."

By section 6 of Act No. 195, of Session Laws of 1847, the above section was amended by scratching out all after the word "meeting," so that the qualification of voters was left as it was in the revision of 1838. The law so remained until 1855, when the legislature passed Act No. 32, entitled :

"An act to extend certain rights and privileges to persons who are taxpayers, but not qualified voters in school districts."

Section 1 of which read as follows :

"That the words 'qualified voters,' as used in chapter 58 of the Revised Statutes of 1846, entitled, 'Of Primary Schools,' except in the fifth section thereof, shall be taken and construed to mean and include all taxable persons residing in the district of the age of 21 years, and who have resided therein for a period of three months next preceding the time of voting."

The excepted section relates to the election of a moderator, director and assessor.

Section 1 of the act of 1855 was amended by Act 110 of the Session Laws of 1867, and made to read as follows:

"Sec. 1. Every person of the age of 21 years, who has property liable to assessment for school taxes in any school district, and has been a resident therein three months preceding any district meeting, shall be a qualified voter in said meeting; and all persons who are entitled by the laws of this State to vote at township and county elections, and residing in said district, shall be entitled to vote on all questions arising in said district, when the raising of money by tax is not in question; and all such persons shall be eligible to office in such school district."

Section 2 of this act repeals section 15 of the primary school law, above quoted. The primary school law underwent thorough revision in 1881, and the qualification of voters was defined by section 5049 Howell's Statutes, as above quoted.

It requires but a cursory review of the above *résumé* to show that the qualifications of voters for school officers, or upon questions arising at school meetings, have never been identical with those of electors, as defined in the Constitution. The legislature has sometimes restricted, and sometimes extended, the qualifications of voters from those prescribed in that instrument. In the first years of statehood the qualified voters in school districts were confined to white male residents who were taxpayers. This was varied from time to time by extending it to residents who were not taxpayers, but had the qualifications of voters under the Constitution, upon all subjects except the election of school district officers and the raising of money by tax. Until 1867 no one could vote for school district officers except white male residents of the district, liable to pay a school district tax. The change effected by the act of 1867 was to divide the voters into two classes, and do away with the "white male" qualification, allowing every person who had been a resident of the district three months, who had property liable to assessment in the district for school taxes, to vote on all questions; and another class not having property liable to be assessed, but who resided in the district, and were

possessed of the qualifications of voters at town and county elections, to vote on all questions not involving the raising of money by tax. This second class must be "white male" persons, as no others could vote at town and county elections. The word "white" was not dropped from the qualification of electors in the Constitution until the amendment to that effect was ratified by a vote of the people in 1870.

The act of 1881, under which the plaintiff claims the right to vote, also confers the right upon two classes—

1. Upon resident taxable property owners in the district upon all questions.
2. Upon all other persons, residents of the district three months or more, who are 21, who are the parents or the legal guardians of children who are included in the school census of the district, on all questions except the question of raising money by tax.

It follows that persons may reside in the school district who possess the qualifications of electors under the Constitution, who are not qualified to vote at school district meetings, for the reason that they do not own property liable to assessment for school taxes.

Viewing the question historically, it is apparent that for 50 years it has never been considered that the qualifications of voters at school district meetings must be identical with those prescribed in the Constitution as qualifications of electors entitled to vote under that instrument. The authority granted by the Constitution to the legislature to establish a common or primary school system carried with it the authority to prescribe what officers should be chosen to conduct the affairs of the school districts, to define their powers and duties, their term of office, and how and by whom they shall be chosen.

School districts are regarded as municipal corporations. *School district v. Gage*, 39 Mich. 494; *Seeley v. Board of Education*, Id. 486. As such they preceded the Constitution (*Stuart v. School district*, 30 Mich. 69), and were recognized by that instrument (Const. 1835, Art. 10, § 8; Const. 1850, Art. 13, § 5). But no officer of the school district is mentioned or recognized by that instrument. The reason is that the whole primary school system was confided to the legislature, and it cannot be said that the officers of school districts, chosen pursuant to the system adopted by the legislature, are constitutional officers. The Constitution provided for no municipal subdivisions smaller than towns, except cities and villages, and it authorized the legislature to incorporate these. Const. 1850, Art. 15, § 13.

While it must be conceded that no person can vote for the election of an officer mentioned in the Constitution unless he possesses the qualifications of an elector prescribed by that instrument, it does not follow that none but such electors can vote for officers which the legislature has the right to provide for, to carry out the educational purpose declared in that instrument. With the policy of the legislature in conferring the right to vote upon the parent or legal guardian of children embraced in the school census, we have nothing to do. Nor is it any objection that each parent of a single child so included in the school census has the right to vote for such school officers. The statute confers the right upon persons in all cases where the question is not the raising of money by tax, and each parent has the same right to vote.

There was no difficulty in exercising the right under the statute in this case. None but school district officers were included in the same ballot; and the law provided that separate boxes should be kept for the reception of these ballots, so that the difficulty met in the case of *Brown v. Phillips*, 71 Wis. 239, was avoided in this case.

The judgment of the circuit court is affirmed.

Sherwood, C. J., concurred. Morse, J., concurred in result.
Campbell, J., dissenting.

Plaintiff sued defendants, who were election inspectors for the Third ward of the city of Flint, for rejecting her vote for school trustees. The election was the general city election for municipal and school officers, held on the first Monday of April, 1888. The ballots for school trustees are put in a separate ballot-box, and she only offered to vote for those officials and for no others. She claimed the right to cast such a vote, as a resident for the legal period, being over 21 years of age, having property liable to assessment for school taxes in the district, and having a child included in the school assessment list. She offered to qualify, but was refused. The court below sustained her action, and gave judgment in her favor, which defendants bring before us with exceptions and writ of error.

The city of Flint, like most cities, has its own special school system, and is nominally a single district, divided by law into three sub-districts, for election purposes only. Its affairs are governed by nine trustees, of whom three are elected yearly, one from each sub-district. The third district includes the third and fourth wards, and one trustee is required to be a resident of the fourth ward. Each voter is required to vote in his own ward for a trustee of his sub-district. The election is governed in all respects in the same way as for the other city officers, except that a separate ballot-box and separate ballot must be used for trustees.

The trustees elect yearly from their own number a president, secretary, and treasurer, who, except as otherwise declared, have the respective powers of moderator, director, and assessor of school districts. The act leaves it in some doubt whether the trustees, or these three of them, are made school inspectors of the district with the powers and duties of inspectors of townships, and with the further powers, as to teachers, possessed by superintendents of schools. The powers expressly given to the whole board cover most of the powers of inspectors. The trustees are empowered to fill all vacancies in their own number. They are also authorized to appoint a city superintendent, to determine the number of schools and the time for the annual commencement of the schools, to hire all necessary teachers and fix their compensation, to classify and grade the schools, to fix the terms of admission, and assign the scholars to schools and departments, to fix courses and adopt books, to maintain a high school, to make all rules and by-laws, to fix and collect tuition fees of non-residents, to locate and change school sites, to determine, up to two per cent., the amounts to be raised for ordinary and incidental expenses in addition to the other school funds and some other less important functions.

A school meeting is to be held annually, and also special meetings may be called for specific purposes. The statute makes the annual school year begin July 1, and the fiscal year close March 15. The only things required to be done at this meeting are the determination whether the schools shall be taught by male or female teachers, or both, and the time school shall be taught, which must not be less than nine months. The trustees may determine these matters, if not fixed at the annual meeting. Upon notice, and not otherwise, the voters at the meeting may vote to raise by tax moneys to buy lots and build and furnish school houses, and may authorize bonds for that purpose, to pay money borrowed therefor, or to take up old bonds. This power for providing for lots and school houses and of obtaining loans is apparently the only power which can not be exercised by the trustees.

Section 5, which is one of the few sections which has not been changed since 1877, is as follows :

"The qualifications of voters at such elections, or at any school district meeting, shall be such as are or may hereafter be prescribed by the general school laws."

The remainder relates to challenging voters, and swearing in votes, and refers to the general laws.

In order to understand some rather blind provisions, it is necessary to notice how the statute now in force obtained its present shape.

Prior to 1877 the statutes referring to this district made one Union school district, with trustees, out of existing separate districts. But Act No. 809 of 1867 (2 Laws of 1867, p. 258), school districts one and three of the city of Flint were consolidated under the title of "Union school district of the City of Flint," with the usual district powers. At the annual school meeting in September the voters were to elect six trustees, to be classified so that two new ones should be selected each year. These trustees were to select from their own number a president, secretary, and treasurer, yearly, whose powers were the same generally as those of moderator, director, and assessor, except as modified, and who were to be *ex-officio* school inspectors. These three officers, however, were given none of the joint powers of a school board, all of which, with much more, devolved on the trustees, as did the important functions of school inspectors. It is difficult to see what remnant of power was left to them, either as officers acting jointly, or as school inspectors. The qualified voters at the school meeting had substantial control of the taxes, and could authorize loans and could make the schools free to residents. Beyond this the power was vested in the trustees. The act was a modification of the graded school district, except that it was fixed by statute, instead of by district action.

In 1871 the district was changed so as to include the second, third and fourth wards of the city of Flint. 8 Laws of 1871, p. 101.

In 1872 (Laws of 1872, p. 48), without changing its name, this district was made to include the whole city of Flint, and parts of outside townships of Flint and Burton. The number of trustees was increased to nine, to be chosen at the annual meeting, and so divided as to have three chosen each year after the first. Three trustees were always to reside north of Flint river, and six south of it. No very great difference was made in the powers of the board and the meeting, but special provision was made for the location of the high school.

In 1877 a law was passed reorganizing this same district, and repealing the former laws. Laws of 1877, p. 801. This law, which made no change in boundaries, provided for making three sub-districts for election purposes, and for holding elections of trustees at such places as the board should determine, on the second Monday of May in each year. These elections were to be presided over by trustees as inspectors, who were to be qualified voters and residents of their sub-districts, and they made their own canvass, and declared the result, which was final. It was in this connection that section five was included, and it in terms, which remain unchanged, makes the presiding officer the person to decide upon the reception of challenged votes. The district corresponded with no legal sub-division of territory; and the elections, which were by ballot, were all managed by district officials, and not by ward inspectors.

In 1879 all but three of the sections of the act of 1877 were materially changed. For the first time the body of the act strictly corresponded with its title, and confined the district to the city of Flint, with which it was made identical. The fiscal year was

changed so as to end in March, instead of August, and the election was to be at the annual city charter election in April, and under the control of the city inspectors of election, and the official terms of service of the school trustees were to end on the first Monday of May, instead of the second. An annual meeting is provided for on the third Monday of May, for the purposes before referred to, all of which, as before stated, are left with the trustees, unless the meeting acts on them, with the single exception of loans, and for taxes for lots and school houses and furniture.

An amendment in 1885 required one trustee to be chosen and maintained in office residing in the fourth ward.

The general school laws do not provide for the intervention of any voters with special qualifications, except at school meetings, and the only school meeting now provided for in the city of Flint is entirely separate from any popular election, and is held, like all school meetings under the general law, under the immediate control of the school authorities. When the law of 1877 was passed the district, although called the "Union School District of the city of Flint," was not so in fact, but included outside territory in townships, and was therefore not coincident with any of the ordinary municipal sub-divisions, either of city or township. Some questions readily suggest themselves concerning the effect of this departure in regard to the operation of both constitutional and legal provisions. It was apparently the idea of those who framed the law of 1877 that, as the district described was a territory by itself, the elections of the trustees referred to in the act were equivalent to district meetings. However this may be, it is evident that the act trenched somewhat on the constitutional provision for township school inspectors, elected by the body of the township. It is certain that school inspectors, in the proper sense of the term, cannot be chosen to act in townships except by ordinary citizen voters. And the laws concerning graded and high schools have always recognized the inspectors of towns and cities as distinct from such district officers as are elected or otherwise chosen at annual meetings. Where a city has a system of its own, the laws have always recognized the city board as a board of inspectors, and these boards have always had powers analogous to those of town inspectors, but much more extensive.

Whatever difficulties may have arisen from the mixture of jurisdictions previously disappeared in 1879, when the city was made the sole territory of the district. And from that time on the election of the board of trustees has been had at the usual city elections, under the management of the ordinary city authorities, and the school authorities have had nothing to do with it. How far school district meetings can be put under different voters from general elections is a question quite separate. Our laws have been in some apparent confusion on this subject for many years, and much of this has arisen from introducing laws from other States, whose system both of voting and of levying school taxes differs from ours, and from at least occasional oversights of constitutional provisions. It is one of the misfortunes of legislation that many well intentioned and otherwise enlightened persons do not appreciate the fact that there cannot be any close uniformity of laws among States that have not the same history and constitutions, and that it is never safe to borrow a foreign law without adapting it to the rest of our legal system.

The Constitution of 1850, by Article 7, Sec. 1, provides who shall be electors and entitled to vote, and is, according to its terms, applicable "in all elections." It enlarged the privileges given under the former Constitution to persons who reside here two years and six months, and declare their intention six months before an election,

who are not full citizens of the United States. Except in war, all voters must vote in the township or ward where they reside, and all elections are required to be by ballot, except for such township officers as are allowed to be chosen otherwise. Section 2. It provides for the election in cities and villages of judicial officers, but allows other officers to be elected or appointed, as the legislature shall see fit. Article 15, Sec. 14.

If this language does not cover all municipal elections, it would require some ingenuity to find out what it does cover. There is otherwise no constitutional safeguard whatever of the local rights and liberties of a very large share of the inhabitants of the State. The power of local administration and regulation which may be allowed to cities and counties is vested in those corporations as such, and it cannot authorize the legislature to change the right of suffrage. If it did it would reach counties as well as cities. But it will not bear any such meaning. Moreover, cities have elected judges and justices who cannot be in office without election, and who perform functions precisely like those elsewhere. The city is represented on the board of supervisors, who are, except in Wayne county, the same as everywhere. The city ward is the constitutional place of election. To import into the Constitution power to enlarge suffrage for one officer must reach all officers. School officers are not put by the Constitution on any peculiar footing. When an election for any local officer is required by law, the Constitution declares who shall be qualified to act as electors. The election of school inspectors by townships is expressly provided for in the article on townships. And from the formation of the State, as ever since the organization of the Northwest Territory, the schools have been treated as quite as necessary a part of municipal government as other parts of its machinery. The school lands were, until otherwise arranged on the admission of Michigan into the Union, the property of the townships containing them, and the territorial school laws provided for the election in each township of trustees to take charge of these lands as soon as it should contain 20 electors. Laws of 1828 (2 Terr. Laws, 695). By the laws of 1827 (2 Terr. Laws, 478), the townships as such were to provide for schools.

The act of Congress of 1823 (3 Laws U. S. 769), which first provided for a popular government, prescribed in express terms the qualifications of voters "at any public election in said territory" to be such as had been previously fixed by a law of 1819, authorizing the election of delegates to Congress (3 Laws U. S. 488). This qualification was that every free white male citizen over the age of 21 years, who had resided in the territory one year before the election, and had paid a county or territorial tax, should be a voter. It was always assumed that this governed townships and cities in their elections.

In the earliest city charter of Detroit, before any general election system, provision was made that the city should provide for education (4 Terr. Laws, 90), and from the earliest time it has been a single school district under its own school board, elected like all other city officers. In 1833 the school laws governing cities and townships were carefully recast, and the identification of education with the municipalities, as such, was more clearly defined than ever. 8 Terr. Laws, 1012, 1288.

In some of the older states the school boards never represented anything but taxable inhabitants, and no taxes were laid except against residents. But in Michigan the taxes have always been levied against the same persons and property taxable for public purposes generally, and non-residents have been compelled to bear their full share theoretically, and sometimes a good deal more, practically. That for public purposes all persons are represented by the constitutionally authorized voters of the State is very

well settled. But taxation is one of the highest attributes of sovereignty, and that cannot be held by any class of men or persons except as depositaries of that prerogative directly or by representation. That representation can only be the direct or indirect result of an election, and the Constitution has declared who, and who only, may vote at an election.

It has been held by this court on several occasions that every school district is a municipal corporation. *School district v. Gage*, 39 Mich. 484; *Tibbals v. Board of Education*, Id. 635. And in *Board of Education v. Detroit*, 30 Mich. 505, its public character was recognized as independent in its range of powers from the other authorities in the same territory, as coördinate in representation.

The close relation between the educational system and the general municipal system has been exemplified in various ways. In *Hatheway v. Sackett*, 32 Mich. 97, it was held to be within the general powers of a village to accept a gift or devise for the purpose of maintaining a high school, as in *Maynard v. Woodard*, 36 Mich. 423, the same ruling was made in regard to a school district to accept a provision by will for a district library, requiring no further legislation so long as it involved no pecuniary burden. And in *Hathaway v. New Baltimore*, 40 Mich. 251, which involved the same bequest referred to in *Hatheway v. Sackett*, it was held that the village corporation could lawfully make use of an auxiliary corporation as its own corporate agent, having facilities to carry out the corporate purposes of the village for school work. It was pointed out in this case that there was no constitutional objection to having corporate as well as individual agencies in aid of municipalities, to do such work as can best be done in that way, and has not been entrusted to any other agency within the same territory. See also *Butler v. Detroit*, 43 Mich. 552, and *People v. Hulbut*, Id. 44, where it was also held that municipal officers must either be elected by the people or appointed by the municipality itself, acting through its elected functionaries. And in *Attorney General v. Detroit Common Council*, 58 Mich. 218, it was held that the elective franchise cannot be changed in any part of the State, but must be uniform.

It was held in the same direction in *Robertson v. Baxter*, 57 Mich. 127, that the essential qualities of townships are fixed by recognition in the Constitution, and cannot be changed, and that public burdens cannot be laid under the Constitution except by persons chosen by the community in which the work is to be done, and no others.

In *Scrafford v. Gladwin supervisors*, 41 Mich., 647, it was held that two similar municipalities could not occupy the same territory. This was in conformity to a settled line of decisions, earlier and later, to the same effect. Thus, in *People v. Geddes*, 3 Mich. 70, it was decided that a township justice was regarded as having removed from the township as soon as his place of abode was brought within a city. In *township of Saginaw v. School district*, 9 Mich. 541, it was held that including any part of a school district within a city severs it from the rest of the district. A similar principle was applied in *People v. Ryan*, 19 Mich. 203, to the effect of creating a new township in cutting off a school district. In *People v. Hatch*, 60 Mich. 229, where an act to create a school district made its boundaries go beyond those given to Bay City by its charter, it was held that the purpose to create a city district confined the district within the city limits, and it could not exceed them.

The same principle which treats the school system as only a co-ordinate branch of the same municipality has been applied in more than one way. As already suggested, the practice has been general of having a distinct school government in cities, adjusted to city conditions. In giving these cities school acts, they are generally made complete

in themselves, and, when not so, are nevertheless very different in their main features from the township school boards and their officers in matters of administration. But in *People v. Detroit Board of Education*, 18 Mich. 400, it was held that an amendment of the general school law, requiring colored pupils to be received on the same footing with others, was applicable in Detroit, and abrogated the power given by the Detroit school act to create separate colored schools, although no reference whatever was made to it in the statute. And the substantial unity of the State school system was in that case very distinctly asserted.

But this has been shown more effectually, perhaps, in regard to the library funds. By the Constitution of 1850 it was provided that the Legislature should provide for the establishment of at least one library in each township; and all fines assessed and collected in the several counties and townships for any breach of the penal laws shall be exclusively applied to the support of such libraries. Article 13, § 12.

Nothing is said in that section about cities, and nothing about school boards, although the article is on education. But it so happens that all of the litigation which we have had in this State to reach the library fine moneys has been in the interest of city school boards, and it has been held in this, as in other cases, that all municipalities in the State were meant to be covered by the rule, and that cities were included in the class named as townships. *Board of Education v. Wayne Co. Treas.*, 8 Mich. 392; *County of Wayne v. City of Detroit*, 17 Id. 390; *Treas. of Wayne County v. Controller of Detroit*, 18 Id. 445.

The Legislature, in providing for the custody of libraries, placed them in the hands of the township boards of inspectors and in the city boards of education, recognizing these bodies as proper representatives of the municipalities for the purpose; and this court held, in *McPharlin v. Mahoney*, 30 Mich. 100, that the library money must be paid over to the board of school inspectors of the township and not kept by the other ordinary town officials.

In 1879 a constitutional amendment was adopted, which was ratified at the next general election, whereby section 12 of article 13 was somewhat modified by allowing the township boards and the city boards of education to use these moneys for school purposes as well as for libraries. This section recognizes the city boards of education the public representatives of cities for these purposes, and as the only city authorities to act in the matter. Since that amendment, even if there had been an ambiguity before, the city boards of education are as distinctly recognized constitutional bodies as any other elective bodies.

There is no city in the State where the board of education has not power to affect the the property of non-residents as well as of residents by public burdens; and under the Constitution all powers of government must come from the electors made such by the Constitution itself. The board of city school authorities is a body having a larger control than township boards. It has all of their powers, and more, and it is by the Constitution made the correlative body to the township board. It can not be questioned that the election of township inspectors is one within the express terms of the Constitution. Neither can it be questioned that the municipal authorities of cities must have their source of election in the constitutional electors. There can be no conceivable distinction in principle between the two.

The school laws undertake to give certain powers to tax payers and some others who are not electors in matters to be passed on at school district meetings. They have never attempted to authorize them to vote for the township boards, as they could not.

The only meaning which can be given to the clauses in the act before us is to make the additional voting qualification confined to electors when voting at school meetings.

Whether it is competent to make any other rule in regard to school meetings we need not now decide. But there has never been any consistent line of statutes recognizing any general power at even school meetings. In the Constitutional convention of 1850, when it was urged on the convention that the elective franchise should be extended to persons not citizens of the United States, it was assumed in the debate, and no one gave any hint to the contrary, that the clause concerning electors would apply in school elections of all sorts.

At the time when the section numbered five, in the Flint school law, was adopted, the only law in existence which attempted to put power in the hands of any but legal electors was a statute of 1855 and its amendments, found in the revision of 1857, § 2888, in its original shape, and in the revision of 1871, as amended, in section 8705.

By section five of the school, as existing up to 1881, the district officers were required to be elected by "the qualified voters of such district." The Legislature of 1855 passed

"An act to extend certain rights and privileges to persons who are tax payers, but not qualified voters, in school districts."

This was at least a distinct legislative recognition of what the words "qualified voters," repeatedly occurring in the general school law, meant at that time. This law declared that henceforth, except as applying to the fifth section of the general school laws, the term "qualified voters" should include all taxable residents of three months, over 21 years old. Section 2 of this statute provided that, in case no election of school officers was had in the district, the town board of inspectors should appoint officers from among the male resident tax payers over 21 years. The statute evidently regarded the constitutional provision concerning elections as applying to district officers, and the only purpose mentioned in the title was to give privileges to tax payers who were not by the statute itself treated as qualified voters. As nothing can be brought into a statute by amendment which is not covered by the title, it is certainly at least doubtful whether the subsequent amendments, which attempted to put resident voters who were not tax payers on a worse footing than tax payers, could be sustained, even if the Legislature had power to pass upon them under a good title. But, however this may be, the law in existence when section five of the Flint statute was passed confined voting by persons not constitutional electors to school meetings, and nothing else, and such is its proper legal effect. It has never been changed, and the general school law in this respect goes no further.

Plaintiff had no right to vote for members of the board of education, and the judgment should be reversed.

Long, J., did not sit.

EXPULSION OF PUPILS.

Holman v. School Trustees of Avon—Schools—Expulsion of Pupils.

MORSE, J.

Hearing an order to show cause why Joseph J. Holman, a son of the relator, of the age of ten years, should not be reinstated in the schools of the above named district, from which he had been suspended. The return of the respondents shows that among the rules adopted for the management and government of the schools in said district is the following: "Pupils who shall, in any way, deface or injure the school building,

outhouses, furniture, maps, or anything else belonging to the school, shall be suspended from the school until full satisfaction is made." The power of suspension is vested in the teachers of the respective departments, but in this particular case the suspension by the teacher was approved and confirmed by the school board. The relator in his petition alleged that the boy was suspended for the reason that he had accidentally broken a window, and had not replaced it. That he applied to Julia Mason, the teacher, who suspended his son, and requested her to reinstate him, but she refused, and then he applied to the trustees, a majority of whom also refused to receive the boy back into the school. The respondents show that on the first day of October, 1889, the pupil "negligently and carelessly broke a window pane in said school building, the size of which was 14 by 40 inches, and that the actual cost of replacing it would be one dollar." After the breaking of the window pane, the teacher requested the boy to notify his father that the broken pane must be replaced. That the next day his father, the relator, sent word by his son to the teacher that if she wanted to know about the window pane to call and see him. The teacher again sent word to the relator that the glass must be replaced or paid for, and received word in return that the pane would be replaced. It was not, however, replaced or paid for, and on the seventh of October, 1889, the teacher again sent word to the relator that the glass must be paid for or replaced at once, or she would be obliged to enforce the rules. The same day the relator called upon the teacher, and refused to replace or pay for the glass, and threatened to prosecute her if she enforced the rules against his son. Miss Mason thereupon consulted with the director, who directed her to issue an order suspending the boy from school until the glass was replaced or satisfaction made therefor. The order was issued, and notice of the same in writing served upon the relator, and notice also given the board of trustees of such suspension. October 11, 1889, the board met, and ratified and adopted the action of the teacher. Attached to the return of the respondents, and made a part of it, are the affidavits of two boys, one 14 and the other 12 years of age, eye-witnesses, setting out the circumstances of the breaking of the window pane, and giving their opinion that it was carelessly and negligently done.

We think the writ should be granted. It will be noticed that there is no claim on the part of the respondents that the breaking of the window pane was malicious or willful. It is averred to have been done carelessly and negligently. The rule of the respondents, as it reads, is broad enough to include any accidental injury, and the respondents claim that they have the right to enforce it; that it is a reasonable and proper regulation, and is the same rule, in substance, adopted in other public schools of the State. They also seek to justify their authority to enforce the rule under section 5069, Howell's Statutes, which provides that "the district board shall have the general care of the school, and shall make and enforce suitable rules and regulations for its government and management, and for the preservation of the property of the district. Said board may authorize or order the suspension or expulsion from the school whenever, in its judgment, the interest of the school demand, of any pupil guilty of gross misdemeanor or persistent disobedience. * * " Granted that "gross misdemeanor," as used in this section, means gross misbehavior or misconduct, and not criminal conduct, and yet the statute does not confer the authority claimed by the respondents in this case. We think the definition of "misdemeanor" in this section is as claimed by the respondents' counsel. It means gross misconduct or gross misbehavior. It is not necessary that a pupil shall be guilty of a criminal act before he can be suspended or

expelled from school. But, before he can be thus dealt with, he must be guilty of some willful or malicious act of detriment to the school, and the misconduct must be gross—something more than a petty or trivial offence against the rules—or he must be persistent in his disobedience of the proper and reasonable rules and regulations of the school. A boy ten years old, or even older, cannot be expelled or suspended for a careles act, no matter how negligent, if it is not willful or malicious. The action taken in this case might, to a poor boy, mean indefinite suspension. This rule might in a great many cases, if enforced, prevent the further attendance of pupils at the public schools, while we have laws on our statute books compelling such attendance. It is not desirable or permissible that a child may be excluded from the common schools because, by a careless or negligent act, without malice or willfulness, it has injured or damaged school property to such an extent that it is beyond its power, or that of its parents or guardian, to make compensation for it. This would be the effect of the rule, if carried out, in many cases. In the present case, no doubt, the father could have replaced this glass without serious financial detriment, and it would have been much cheaper for him to have done so. But he saw fit to stand upon his rights, as he was privileged to do, and by so doing test the power and authority of school boards in this State to adopt and enforce such rules as the one before us, which, in other instances, might deprive poor children who are careless, as all children are careless, of the right to a common school education, which the laws and policy of our State have guaranteed to them so carefully that the parent is punished if he neglects or refuses to give his children the benefit of the public schools. The writ will issue as prayed.

Long, J., did not sit. The other justices concurred.

COMPENSATION OF TEACHERS.

Devoe v. School District No 3—School Districts—Compensation of Teachers.

MORSE, J.

Plaintiff sued in justice's court to recover balance of wages as school teacher. He had judgment, and defendant appealed to the circuit court, where plaintiff again prevailed, the circuit judge directing a verdict in his favor for \$28.32. Judgment was entered upon the verdict, and defendant assigns error. When the plaintiff rested the defendant asked the court to direct a verdict in its favor, which request was refused. It should have been granted. We are satisfied that the plaintiff had no case upon his own showing. He had taught in the school the year before for seven months, and gave good satisfaction. He made a verbal contract in 1887 to teach the school for a term of five months. He held at that time a certificate from the board of examiners of Saginaw county, in which county the school was situated. This certificate would expire on the 30th of October. About a month after, he commenced teaching. About the time of its expiration he went before the board of examiners, and a certificate was refused him. He was told, however, that the board would meet again in about a month, when he would be given a new trial. At the next meeting of the board, the last of November, he was again examined, and again refused a certificate. He kept on teaching until about three weeks after this second rejection, when the school was closed by the board under the direction of the secretary of the board of county school examiners. The first month he received an order and was paid. When he went at the

end of the second month to get his order, which was before his second rejection, but after his first examination, one of the officers, the moderator, hesitated about signing it, for the reason that he had been refused a certificate; but, as he was about to make a second trial for such certificate, the order was finally drawn, and he received the second month's pay upon it. His claim in this suit is for three weeks that he taught after this, and after he had failed on the second examination. Plaintiff testifies that he spoke to the director about a contract about the time he commenced school, and that officer said he had no blanks, and requested him, when he went to East Saginaw, to get some. Plaintiff, when he went to East Saginaw, could find none, and so informed the director, who promised to obtain some as soon as possible. After plaintiff had taught about six weeks the director informed him that he had procured the blanks, but he would not enter into the contract until plaintiff obtained a certificate. He testifies that the director told him after the first examination to go on with the school until he was examined again, and that after he was rejected the second time the director told him to keep on teaching, but that he had no talk with the other officers about it, and only notified the director that he had been rejected. The director denies that he told plaintiff to keep on teaching after the second rejection; but this is immaterial, as we are now dealing with the plaintiff's case as he made it. Plaintiff further testified that he knew that, unless he had a certificate, any contract he might make with the school board to teach would be illegal and void.

We think he was paid all that he ought to have been, under the circumstances. He knew that he could not legally teach school without a certificate, after his second rejection. His only claim for wages or pay for his services after that time is based on the fact that the director told him to go on, and he was permitted to teach until the school was closed by the county board of examiners or its secretary. He had no arrangement with the other officers of the school district, and did not talk with them on the subject, or notify them that he had been refused a certificate for the second time. The director had no authority alone to bind the district, and there is nothing in the case that estops the district from disputing the plaintiff's right to recover. The case differs from *Crane v. School district*, 61 Mich. 299, and *Holloway v. School district*, 62 Mich. 158. In the latter case the only invalidity urged against the written contract was that one of the school officers did not sign it, and there had been no adoption or ratification of the agreement at any meeting of the school board. We held that "plaintiff had a right to suppose his contract was a valid one when it was signed by a sufficient number of the officers, and he was with the personal knowledge of the whole board permitted and apparently encouraged to proceed;" and that "a contract valid on its face, actually carried out in full, with the acquiescence of all concerned, cannot be subsequently repudiated." *Crane v. School district*, supra, involved a similar state of facts as the case above considered. In the case at bar the plaintiff had no valid contract with the school board, and knew that he was running the risk of non-payment if he kept on teaching. The last order was signed by the moderator only in the hope that he might, on the second examination, procure a certificate. After he was rejected the second time, he was not authorized, according to his own testimony, except by the director. He did not see the other officers, and there is no evidence that either of them did anything upon which the plaintiff acted in continuing the school. He knew that the director could not bind the district to pay him for the teaching he did after his second failure to obtain a certificate. He seems to have kept on, in the hope that he might obtain another order and draw his pay for his work, instead of relying on any belief

that he was legally entitled to such pay. The district were entitled to a qualified teacher, under the law, and when the plaintiff failed to procure a certificate, upon two trials, it was his business to quit. And after such failure neither one nor all of the district officers could continue him in the school, and bind the district to pay for his services, as it is shown that there was no difficulty in obtaining qualified teachers in that vicinity. See *Lee v. School district*, 88 N. W. Rep. 867. The judgment is reversed, and a new trial granted, with costs of this court.

Long, J., did not sit. The other justices concurred.

QUALIFYING—RECOVERY OF BOOKS AND PAPERS.

Culver v. Armstrong—School officers—Qualifying—Recovery of Books and Papers.

MORSE, J.

In this case it is clear that at the annual school meeting of district No. 8, of the township of Pinora, Lake county, held on the evening of September 8, 1888, John Speers was duly elected assessor, and Levi W. Ricker moderator. This is shown by the official record of the meeting, made up and signed by Michael Derschell, director, and P. McLaughlin, moderator. These officers were elected to take the places of P. McLaughlin and John Lindner. The record also shows that the same evening of the annual meeting said Speers and Ricker wrote out their acceptance of the offices and handed the same to the moderator, McLaughlin, who either handed them to the director, Derschell, or laid them on the table in front of them. When the director left the building where the meeting was held, he gathered up all the papers on the table and carried them away with him. The next day Speers and Ricker heard rumors that they had not properly accepted the offices to which they had been elected, and therefore went to Derschell's house in the evening to again tender their acceptances, but found him away from home. On the morning of the 5th of September, 1888, they again called at the director's house and found him at home. They had with them the necessary papers, acceptances and bonds with which to qualify. Derschell refused to receive them, or do any business whatever with them, stating that he had no time for school matters. Speers and Ricker were anxious to qualify and were somewhat persistent in their endeavors to do so. They followed Derschell out to his stable and tried to coax him to receive the papers and finish up the business, as it would take but a few minutes. Derschell finally lost his temper, and, drawing an axe, threatened to use it upon them if they followed him further, and notified them that if they bothered him any more it would be at the "peril of their lives." It further appears from the record that Derschell, the day before (September 4), had written out his resignation of the office of director and handed it to one of the old officers. Thereupon, and on September 6, 1888, McLaughlin and Lindner, claiming to hold over for the reason that their successors had not been duly elected and qualified, met and appointed Walter Armstrong director in the place of Derschell. September 22, 1888, Armstrong, McLaughlin and Lindner, claiming that they composed the legal school board of the district, met and hired Derschell's daughter Anna for teacher of the school for the term of six months, at \$30 per month. This probably furnishes the key to Derschell's action, and the motive of it. September 11, 1888, Speers and Ricker, claiming to hold the offices to which they were undoubtedly legally elected, met and appointed George W. Culver director, to fill the vacancy caused by Derschell's resignation, of which

resignation they were informed by the action of the old board in appointing Armstrong, and the surrender of the books and papers of the district to Armstrong by Derschell. Culver, having qualified, thereafter demanded the books and papers belonging to the office of director of Armstrong, who refused to deliver them up. Thereupon Culver, under chapter 295, Howell's Statutes, made complaint to the judge of the circuit court for the county of Lake. Upon this complaint a hearing was had and testimony was taken in open court; both parties appearing and a full investigation being gone into as to the facts. December 6, 1888, the circuit judge, Hon. J. Byron Judkins, made an order that the said Walter Armstrong deliver the books and papers belonging to the said office over to the said George W. Culver.

We are asked to review these proceedings on writ of *certiorari* sued out by said Armstrong. We have done so. We are satisfied that Ricker and Speers were duly elected at the annual school meeting, by a majority of the qualified electors of the district present and voting, moderator and assessor, respectively, of said district. We are also further satisfied that they were prevented from filing their acceptances, and otherwise qualifying, by a conspiracy between the old officers, McLaughlin, Lindner, and Derschell. This conspiracy was for personal ends, one of the objects being to keep McLaughlin and Lindner in, that they might employ Derschell's daughter as teacher. Derschell's resignation was for the express purpose of preventing Ricker and Speers from qualifying. Ricker and Speers each did all in his power to qualify. Duly elected school officers cannot be prevented from holding the offices to which they are elected by any such proceedings as these on the part of the retiring officers; and no technicalities will be permitted to defeat the will of the electors, fairly and honestly expressed at the annual school meeting, in the choice of district officers; and public policy and the best interests of the schools require that controversies as to who are the legal officers of a school district shall be settled as speedily as possible. It is substantially admitted by the counsel for the respondent, Armstrong, that Ricker was duly elected; and the record of the meeting, made up by the old officers, shows that Speers received 18 votes to 16 for Lindner for assessor. But it is claimed that the ballot was an informal one. The record so shows; but it also appears that a motion that Speers be considered elected upon that ballot was carried, and, without any question as to his election, the meeting then proceeded to vote for assessor. We think he was fairly elected, and that, after the tender of their acceptances and bonds were made to Derschell, Ricker was the lawful assessor, and Speers the legal moderator of this school district. This ends the controversy as to who is the director. Culver being appointed by the legal school board, was the director, and entitled to the books and papers at the time of his demand for the same. We shall not look further into the proceedings before Judge Judkins to ascertain whether or not he erred in some matters as to the admission or rejection of testimony. If he did err, as claimed, it did not, or could not, affect the merits of the controversy or the result. It is perfectly plain that his order was just, and the only one that could have been made under the facts as shown by the testimony on both sides.

Nor do we think that Culver made a mistake in his remedy. We think the proceedings taken under the statute more appropriate than that of *quo warranto*, being more speedy and simple. The legislature evidently intended that it should reach just such a case as the one before us; for it is provided, in case of vacancy, that the successor to the office (which would be one legally appointed, as well as legally elected) can take the proceedings to recover the books and papers belonging to the office as well against any person who may have the possession of them as he might, under the statute,

against the officer who has been removed, or whose term has expired. Howell's Statutes, § 8547. The action of the old school board officers was unjustifiable, and without any excuse. We think the circuit judge was none too severe in his strictures upon their conduct. His order in the premises is affirmed. The writ of *certiorari* will be dismissed, with costs of this court, and of the proceedings before the circuit judge, against the respondent, Armstrong.

The other justices concurred.

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SEVENTH ANNUAL REPORT

OF THE

BUREAU OF LABOR

AND

INDUSTRIAL STATISTICS.

FEBRUARY 1, 1890.

BY AUTHORITY.

LAN SING :
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LETTER OF TRANSMITTAL.

STATE OF MICHIGAN.
BUREAU OF LABOR AND INDUSTRIAL STATISTICS, }
Lansing, February 1, 1890.

HON. CYRUS G. LUCE, *Governor of Michigan:*

DEAR SIR—In compliance with section two, Act No. 156, Public Acts of Michigan, of 1883, I have the honor to transmit herewith the seventh annual report of this Bureau.

Very respectfully,

A. H. HEATH,
Commissioner of Labor.

INTRODUCTORY.

In preparing this report, an effort has been made to obtain reliable information relating to the social and industrial conditions surrounding the employés in one of the leading industries of the State. The investigation has been confined to the furniture manufacturing industry, and has been systematically carried on through special agents, employed by this bureau, who have visited the various factories, and had personal interviews with the men employed, recording their answers to questions contained in the blanks furnished by the bureau for this work, from which the following tables have been compiled. The answers to the questions enumerated in the tables are therefore the personal testimony of the men employed, and are entitled to credit.

The compilation has been carefully made by competent persons, with a view to present in tabular form the statements of the employés as made to the agents of the bureau. While the canvass does not include the full force employed in this industry, enough has been obtained to show a good average, and the conditions shown are a fair representation of the conditions surrounding those employed in this industry throughout the State.

The canvass has been tabulated in three divisions: First, for the city of Grand Rapids; second, for the city of Detroit; and third, for all cities and villages outside of Grand Rapids and Détroit.

By this division a comparison relative to family expenses, rate of rents, and ownership of homes can be made between the large cities, where property and rents are high, and the cities and villages of the interior of the State, where real estate and rents are low as compared with the large cities.

The testimony of each workman canvassed in Grand Rapids is given in table No. 1, those in Detroit in table No. 9, and those outside of Grand Rapids and Detroit in table No. 17, showing occupation, nationality, conjugal relations, number in each family, and number supported, number of months employed, time lost, cause for loss of time, wages, total annual family earnings, amount of money had on arrival in the United States if foreign

born, family expenses during the year, the amount saved during the year, the amount at interest or in bank, number and value of homes owned, number renting homes, with monthly rental, number owning sewing machines and musical instruments, newspapers and periodicals taken, and the amount of life insurance and benefit provided in case of sickness or accident. In the preparation of these tables, an effort has been made to obtain and present actual facts relating to the conditions enumerated surrounding the laborer, and to present them separately, thus avoiding the necessity of giving averages.

In table No. 2 for Grand Rapids, table No. 10 for Detroit, and table No. 18 for the State outside of Grand Rapids and Detroit, is given by firms, the total canvass made in those localities.

As there is employed in this industry quite a percentage of youths and boys, the canvass has been tabulated in three divisions, which we present in table No. 3 for Grand Rapids, table No. 11 for Detroit, and table No. 19 for the State outside of those cities, showing by firms the number of employes canvassed, 19 years of age and over, the average number of months employed during the year, average annual earnings, the number supporting families, the number of persons supported, the total annual family expense and the average family expense per capita. Also the number canvassed from 15 to 19 years of age, and the number 15 years of age and under, showing the number of months employed, and the average annual earnings. By this division or classification, those 19 years of age and over are designated as men, those from 15 to 19 youths, and those 15 years of age and under as boys.

This classification shows the average annual wage earnings of each class, thereby making a more nearly correct exhibit of what is usually implied by the term "Average annual earnings," than could be shown by computing an average from the whole number employed regardless of age, as that term is usually understood to apply to those earning men's wages.

In table No. 4 for Grand Rapids, table No. 12 for Detroit, and table No. 20 for the State outside of Grand Rapids and Detroit, is shown by firms, the number of men having families, the number owning and the number renting homes, the percentage of families owning, and the percentage renting homes, the total annual earnings of those renting, together with their total annual family expenses, the total amount paid for rent, the percentage of earnings paid for rent, and the percentage of family expenses paid for rent.

Table No. 5 for Grand Rapids, table No. 13 for Detroit, and table No. 21 for the factories in the State outside of Grand Rapids and Detroit, show the numbered canvassed 19 years of age and over in each factory, the number

born in the United States, the number born of American parents, the number born in the United States of foreign parents, and the number foreign born, the number married and the number single, the number supporting others than themselves, and the number supported, the kind of work, the average age they began work, and the number who can read and write.

The number canvassed between the ages of 15 and 19 years of age is given in table No. 6 for Grand Rapids, table No. 14 for Detroit, and table No. 22 for the State outside of Grand Rapids and Detroit, showing the number born in the United States, the number born of American parents, the number born of foreign parents, and the number of foreign born, the average age they began work, whether employed at machine or hand work, and the number who can read and write.

In table No. 7 for Grand Rapids, table No. 15 for Detroit, and table No. 23 for the State outside of Grand Rapids and Detroit is given the number canvassed 15 years of age and under, showing the number born in the United States, the number born of American parents, the number born of foreign parents, and the number foreign born, the average age they began work, the kind of work at which they are employed, the number who can read and write, and the number who cannot read and write.

An effort was made to obtain from each firm or employer in this industry, a statement showing the number in his employ on the first pay day in May, 1889, the aggregate wages paid during the last fiscal year, and the wholesale value of goods manufactured during that period. Blanks were prepared and sent out with the request that they fill and return them to the bureau. In response to this request fifty-four firms reported which in point of number of employes, represents about 75 per cent of this industry, according to our best information.

The employers' reports are given in table No. 8 for Grand Rapids, table No. 16 for Detroit and table No. 24 for the State outside of Grand Rapids and Detroit.

In the general summary, on the opposite page, the industry is treated as a whole. Following the tables of each division will be found a synopsis of the work which is confined to the localities treated in the tables.

GENERAL SUMMARY.

Seventy-eight factories were canvassed by the special agents of this bureau: Twenty-eight in Grand Rapids, 15 in Detroit, 3 each in Owosso, Northville, Charlotte and Sturgis, 2 each in Manistee, Muskegon, Big Rapids, Buchanan and Holland, and one each in Adrian, St. Johns, Otsego, Grand Ledge, Sparta, East Saginaw, Constantine, Ann Arbor, Pottersville, Newaygo, Hillsdale, Niles and Allegan. The names of the companies and firms are given in the tables and summaries which follow this. First is printed all of the tables, the synopsis and the summary for Grand Rapids; second, the same for Detroit; third, the same for the cities and towns outside of Grand Rapids and Detroit.

The synopsis by firms is given, commencing with the city in which the largest number of employes were canvassed, and so on down to the village in which the smallest number were canvassed. In each city or village the firms are enumerated in like manner, according to the number canvassed. In response to circulars sent out from this bureau 54 out of the 78 firms gave the following information: Total number of employes upon their pay roll on the first pay day in May, 1889, 6,913. Total amount of wages paid during their past fiscal year, \$2,554,365, amounting to \$369.50 per capita for man, boy and girl employed. This also includes salaries of foremen, superintendents and traveling salesmen. The wholesale value of the goods manufactured during the same period of time was \$7,210,132. The per cent of wages to wholesale value of the goods produced is .35+. Wherever per centage is given in this report, followed by the plus (+) sign, it indicates that the rate is a trifle greater than the figures given.

In the 78 factories in this State the special agents of this bureau made a personal canvass of 5,226 men and boys and 221 girls. This is the largest personal enumeration of working men ever made by the bureau. This general summary includes the men and boys only. The following is the nationality of the 5,226 employes: Americans, 2,509; Hollanders, 1,159; Swedes, 159; Germans, 738; Polanders, 76; Scotchmen, 28; Russians, 23; Englishmen, 94; Canadians, 240; Frenchmen, 10; Danes, 46; Norwegians, 24;

Austrians, 28; Irishmen, 45; Belgians, 20; Brazilians, 3; Welshmen, 1; Finlanders, 1; Swiss, 11; not answered, 1; West Indies, 1; born on the ocean, 2; Burmuda Islander, 1; Isle of Man, 1; Central American, 2; Italians, 3. Of the employés .51 per cent are foreign born; .42 per cent of the foreigners are Hollanders. This nationality live and work almost exclusively in Grand Rapids; only one works in Detroit and only 49 in the remaining factories throughout the State. The Germans comprise .27+ per cent of the foreigners, and are more generally dispersed throughout the State than any other nationality. Outside of Grand Rapids and Detroit they comprise .41+ per cent of the foreign workmen employed in this industry. The next nationality in numbers are the Canadians, who comprise .08+ per cent, and the Swedes, .05+ per cent. The other nationalities, taken separately, are each less than .01 per cent of the whole number.

In the factories outside of Grand Rapids and Detroit, the employés are mostly Americans. In the former city, .64+ per cent are foreigners; in the latter, .57+ per cent, and outside of the two cities above mentioned, .26+ per cent. Grand Rapids and Detroit raise the per cent in the State as a whole to .51+ per cent.

Of the 2,509 who are reported as having been born in the United States, 1,468 had American parents, 223 Holland, 449 German, 103 English, 133 Irish, 18 Polish, 1 did not answer, 29 Canadian, 30 Scotch, 7 Austrian, 25 French, 1 Russian, 4 Danish, 2 Norwegian, 2 Swedish, 1 Welsh, 6 Belgian, 1 Spanish, 1 New Zealand, 5 Swiss; .41+ per cent of those who are reported as having been born in the United States had foreign parents. Of those of foreign parentage, .43+ per cent had German parents, .21+ per cent Holland, .12+ per cent Irish, .09+ English, and the remaining nationalities were less than .01 per cent each. Outside of the two cities, those of Irish and English extraction, respectively, come next to German in numbers. Of the total number of employés, 2,530 are married, 108 are widowers and 2,588 are single; .48 per cent are married, including the widowers. The large number of boys and young men who work in the Detroit factories reduces the percentage for the whole State. In Detroit there is 35 per cent, in Grand Rapids the per cent of married is .51+, and in the factories outside of Grand Rapids and Detroit it is .52+. There are 5,981 children in the families. This is not a large number considering the fact that so many of the workmen are foreigners, who are generally credited with having large families. They will average a trifle over $2\frac{1}{2}$ to the family. This is one less than other statistics have shown. Two thousand two hundred and thirty of the children attend school; 2,471 of the employes care for themselves only and do not contribute to the support of others; 2,761 sup-

port with their earnings, other than themselves, 8,405 persons. Total number of months employed during the year, 55,500 $\frac{1}{2}$, an average of 10.6. The average in Grand Rapids is 10.5, in Detroit 10.4. The outside factories bring up the average. Three thousand five hundred and thirty-two lost time during the year, amounting to 141,697 days. Ten hours is a day's work in every furniture factory in the State. No store order or truck system is in vogue. None operate company stores. All of the employés in this industry are paid in cash. Three firms pay monthly, 26 semi-monthly, and 49 weekly. The total annual earnings are \$2,139,865, amounting to \$409.46 per capita, man and boy. The per capita reported to us by the 54 firms who responded to our circular request for information is \$369.50, a difference of \$39.96.

In the per capita reported to us by the firms is included the cheap girl help, which is not included in the per capita figured by this bureau. The loss by working short hours in winter was also not deducted.

Three hundred and fifty seven foreigners reported that they were not naturalized; 521 had money when they arrived in this country, amounting to \$66,163.50; 167 have sent money to relatives or friends in the old country, amounting to \$11,594.90. Only .19+ per cent of the foreigners had money when they arrived in this country. Of the foreigners who live outside of Grand Rapids and Detroit, .31+ per cent brought money with them. This is owing to the fact that those who live and work in the smaller cities and villages have been in this country for a longer time than those who live in the cities. The newly arrived foreigners crowd into the cities. Those foreigners who came to this country in earlier years, as a rule, brought money. Those who have arrived within a few years do not bring money. The Commissioner of Emigration reports that 60 per cent of those who are now arriving in this country have had their passage paid by friends.

The cost of working tools during the year was asked, to ascertain whether that was any considerable item of expense with working men; 1,105 reported that they had bought tools amounting to \$8,709.45. Total annual family expenses, \$1,149,171, amounting to \$102.91 per capita. In Grand Rapids the per capita is \$102.94; in Detroit, \$112.58 and in the outside cities, \$99.99. Nine hundred and fifty-one of the employés live at home and give all of their wages to their parents. This is .18+ per cent of the whole number of employés. Among the foreigners the children are compelled to give their wages to their parents. The children of American parents generally pay a stated sum for board and keep for their own use all over the price of board, while many do not pay any board, but live at home with their parents, and spend their earning themselves. This is shown by the statistics in Detroit, where .36+

per cent of the employés give all of their earnings to their parents; in Grand Rapids .19+ per cent, while in those cities outside, where the majority of the workingmen are Americans, only .09+ give their wages to their parents. During the year 1,213 employés saved \$133,170. This sum includes the payments made on homes; .23+ per cent of the employés saved money. The per centage is the largest in the smaller places. In Grand Rapids it is .19+, in Detroit .11+ and in the outside cities .33+.

In Grand Rapids .04+ per cent of the total annual earnings were saved, in Detroit it is the same, .04+, and in the outside towns, .09+. The per cent for the whole State is .06+. Five hundred and twenty-five have money in the savings banks or at interest, amounting to \$163,324. One thousand three hundred and thirty-two own homes valued at \$1,484,940. Average value of each home \$1,122.32.

Of the employés 19 years of age and over, .33+ per cent own homes. In Detroit it is .30+, in Grand Rapids .31+ and in the outside towns .38+. The per cent of home owners to those who are married is .50+. In Grand Rapids it is .40+, in Detroit .51+ and in the outside towns .55+.

Considering the high price of city lots in the two cities, the per cent of home owners make a better showing than in the other places. Seven hundred and ninety-eight of the homes are mortgaged for a total of \$355,192; 1,268 rent and pay a monthly rental of \$8,181.82, an average of \$6.45. In Grand Rapids it is \$6.58, in Detroit, \$7.56, and in the outside towns \$5.67. The total annual rent is \$98,181.84, an average of \$77.43. The per cent of rent to annual earnings is .15+; in Grand Rapids .15+, in Detroit .17+ and in the outside towns .13+. The per cent of rent to family expenses is .17+; in Grand Rapids .18+, in Detroit .17+, in the outside towns .15+. Of the families .48+ per cent rent. In Grand Rapids and Detroit the per cent is just the same, .51+, and in the outside towns it is .43+. One thousand eight hundred and sixty-four families own sewing machines, which is .70+ per cent. In Grand Rapids it is .69+, in Detroit .65+ and in the outside towns .77+. Three hundred and thirty-eight employés own organs, 87 pianos, 62 violins, 39 guitars, 24 melodeons, 20 banjos, 20 accordions, 14 cornets, 12 horns, 7 zithers, 5 clarionets, 5 flutes, 3 harmonicas, 2 harps, 1 piccolo, 1 drum and cymbals, 1 bass viol, 1 fife, 1 drum. They are recorded according to their seeming popularity. This shows the degree of musical talent which is being developed among workingmen; .12+ per cent own musical instruments; in Grand Rapids .05, and Detroit leads the former city with .16+. The per cent in the outside towns is also .16+.

Two thousand seven hundred and sixty-seven take newspapers and magazines, which expresses in some degree the intelligence of the workingmen.

This is .52+ per cent; in Grand Rapids .47+, in Detroit .46+, and in the outside towns .66+; 1,520 daily papers are taken, 2,704 weeklies, two semi-monthlies, and 468 monthlies.

One thousand five hundred and twenty-three of the employes board, which is .29+ per cent; in Detroit .25+, in Grand Rapids .28+, and in the outside towns .31+. The total weekly cost for board and room is \$5,368.49, an average of \$3.52. In Grand Rapids it is \$3.77, in Detroit \$3.53, and in the outside towns \$3.11. Total annual board \$279,161.48. Six hundred and thirty-four of the more provident employes have provided for their families by life insurance, which is .12+ per cent. This is quite an even average. In Grand Rapids it is .11+, in Detroit .14, and in the outside towns .12+. The total life insurance is \$977,308. One thousand two hundred and thirty-nine have provided for sickness or accident by membership in benefit societies. This is .23 per cent. In Grand Rapids it is .28+ per cent, in Detroit .17+, in the outside towns .17+. The total weekly benefit in case of sickness or accident is \$7,506.72, an average of \$6.05. In Grand Rapids it is \$5.98, in Detroit \$7.34, in the outside towns \$5.74.

When the employes first began work as boys in the shops or learning their trade, 5,116 had good health, 47 fair, 44 poor, and 16 did not answer the question. The present state of health of employes is 4,568 good, 432 fair, 207 poor, and 16 did not answer. Two hundred and thirty cannot read, which is .04+ per cent, and 269 cannot write, which is .05+. In Detroit it is .04+ who cannot read, and .04+ who cannot write, in Grand Rapids it is .05+ per cent who cannot read, and .06+ who cannot write; in the outside towns it is .01+ who cannot read, and .02+ who cannot write. This does not confine the negative reply to those who cannot read and write the English language, but to those who cannot read or write in any language.

In answer to the question: "Are you subject to loss of wages by error, waste, or breakage?" Four thousand nine hundred and ninety-seven replied and 229 did not answer. Of those who replied only 87 said that they were subject to loss. This is less than .01 per cent of the number replying and is not any serious burden upon the workingmen. To the question: "Are you required to exercise more than ordinary care to prevent accidents to yourself or others?" Four thousand nine hundred and twenty-eight replied and 298 did not answer. Of those who answered 836 said yes. They included engineers and men who ran or worked about machines or machinery. This is .16+ per cent of the number replying. "Have wages increased or decreased during the past 5 years?" In compiling the answers to this question we have deducted 582 boys who are under 16 years of age and 98 foreigners who have been in this country less than one year, as the

question would not apply to them. Five hundred and fifty-seven did not answer the question. The 3,989 who did gave the following replies: 1,768 an increase, which is .44+ per cent of the number replying; 790, a decrease, which is .19+ per cent, and 1,431 reported wages just the same as 5 years ago, which is .35+ per cent.

“Do you pay cash when you purchase your goods, or do you buy on credit from one pay day to the other?” From this question we expected to ascertain to what extent the workingmen bought on credit. One thousand two hundred and thirty-nine did not answer the question, and 3,987 did. Their replies were as follows: Three thousand three hundred and sixty-nine pay cash, which is .84+ per cent of those who answered, 116 both pay cash and buy on credit, which is .02+ per cent of those answering the question, and 502 buy on credit, which is .12+ per cent of those answering.

To the question: “Do you keep an itemized account of your expenses?” nine hundred and six made no reply; 3,848 do not keep an itemized account and 472 do. The keeping of an account of personal and family expenditures by workingmen is a matter of great importance to labor bureaus and statisticians and to laboring men themselves, and should receive that attention and consideration from the wage-workers which its consequence demands. From the investigations made it appears that only .10 per cent. keep an itemized account of receipts and expenditures. It is a self-evident fact that if business men generally were as lax in this matter as workingmen nothing but bankruptcy and financial ruin would result. If this be true of business men, why not in the same degree true of workingmen? If they would keep an accurate account of their receipts and expenditures, together with time worked and lost, with reason for lost time, it would enable this bureau to give reliable and very valuable statistics regarding the cost of living. It would also teach the men method and system, and point out how to economize in many ways, and indicate where unnecessary personal or family expenses can be dispensed with, which without the knowledge of the amount expended for needless articles would not be known. It is hoped that every wage-worker will see the necessity for keeping such an account. Home book-keeping sheets, gotten up expressly for mechanics and laboring men, are supplied free by this bureau.

“Are you as well off as you were 5 years ago?” From the replies to this question we deducted the 582 boys who are under 16 years of age and the 98 foreigners who have been in this country less than one year. Three hundred and twenty-five did not answer the question; 4,221 made reply; 3,221 said that they were as well off as they were 5 years ago, which is .76+ per cent of those answering the question; 510 said that they were not as well

off, which is .12+ per cent of those answering the question, and 490 said that they were better off, which is .11+ per cent. The majority of those who said that they are as well off or better off are young men who 5 years ago were learning trades and have since been advanced to man's wages or are foreigners who came to this country since 5 years ago, who, as a matter of course are as well off or better off.

In Grand Rapids and Detroit 2,059 employés were asked if they were in favor of eight hours as a work day. The replies were as follows: Yes, 1,783; no, 208; don't know, 39; can't say, 9; don't care, 8; hardly know, 3; all the same, 3; won't say, 1; can't tell, 1; immaterial, 1; and 3 preferred a Saturday half holiday.

FURNITURE MANUFACTURING INDUSTRY

FOR

GRAND RAPIDS.

TABLE No. 1.—Showing the individual reports of the employees

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	No. of days of lost time during the year.	Causes for loss of time.	Wages received.
WIDDICOMBS FURNITURE CO.						
Machine hand...	14	Michigan	Holland	104	school	\$2 80 w
Laborer.....	27	Holland	"	59	no work	1 25 d
Machine hand...	32	"	"	35	"	1 25 "
" ".....	17	"	"	126	"	3 70 w
" ".....	40	"	"	13	shut down	7 50 "
" ".....	19	"	"		"	3 70 "
Laborer.....	24	"	"		first wrk in U.S.	7 50 "
Machine hand...	15	"	"	13	shut down	3 10 "
" ".....	41	"	"	13	"	13 00 "
" ".....	15	"	"	13	"	2 80 "
Laborer.....	47	"	"		"	7 50 "
Machine hand...	14	"	"		first work	2 10 "
Laborer.....	47	"	"		no work	8 25 "
Machine hand...	43	"	"	18	shut down	7 50 "
Laborer.....	43	"	"	26	sick & shut down	7 50 "
Machine hand...	14	"	"		shut down	3 40 "
" ".....	13	"	"		school	3 10 "
" ".....	43	"	"		no work	3 10 "
" ".....	17	"	"		shut down	4 80 "
" ".....	16	"	"		"	2 20 "
" ".....	19	"	"		"	4 50 "
" ".....	47	"	"		"	10 00 "
Laborer.....	46	"	"		"	7 50 "
Machine hand...	44	"	"		"	7 50 "
" ".....	18	"	"		"	4 00 "
" ".....	27	"	"		"	9 00 "
Laborer.....	36	"	"		"	7 50 "
Machine hand...	21	"	"		no work	4 00 "
Cabinet-maker...	31	"	"		"	8 25 "
" ".....	17	"	"		"	4 50 "
" ".....	20	"	"		"	6 00 "
Machine hand...	17	"	"		"	2 40 "
" ".....	21	"	"		"	4 80 "
Cabinet-maker...	36	"	"	224	sick, no work	7 50 "
" ".....	31	"	"	52	no work	8 25 "
" ".....	18	"	"	52	shut down	5 00 "
" ".....	28	"	"	26	no work	10 00 "
Machine hand...	20	"	"	52	"	75 d
" ".....	16	"	"		first wrk in U.S.	3 40 w
Cabinet-maker...	16	"	"	26	no work	3 50 "
" ".....	46	"	"	52	"	9 80 "
Laborer.....	46	"	"	13	shut down	9 00 "
" ".....	37	"	"		"	8 25 "
Cabinet-maker...	13	Michigan	Holland	73	no work	3 50 "
" ".....	14	"	Michiga	26	"	3 00 "
" ".....	27	Holland	Holland	52	"	7 50 "
Laborer.....	33	"	"	13	shut down	7 50 "
Cabinet-maker...	26	"	"	52	no work	9 80 "
" ".....	14	"	"	13	shut down	3 50 "
" ".....	17	"	"		first wrk in U.S.	4 50 "

in the Furniture Manufacturing Industry in Grand Rapids.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
300			*	0				no	none								12
325			0	0				no				1	\$7 50				16
357				0				no									13
96			*	0				no				2	3 50				10
373	0			0				no					*				12
192			*	0				no					*				10
276	0	\$276		0			\$5 00	no					*				11
106				0	\$10			no					*				12
596	0	600		0		\$900		yes				2	*				10
140			*	0		no		no					*				12
380	0	380		0			4 50	yes					*				18
91			*	0				no					*				13
393	0	393		0			6 00	no					*				18
373	\$0 50		\$20	0				no					3 00				12
357		357		0				no				1					12
88			*	*				no					*				8
73			*	0				no					*				11
356		356		0			6 00	yes					*				10
229			*	*				no					*				10
194			*	*				no					*				11
224			*	0				no					*				7
518		509		0		1,000	\$400	yes				2					12
373	5	375		0		no	5 00	no					*				9
373	0	375		0		no	6 00	no				1	*				10
199	0		*	0				no					*				11
429				0		600		no					4 00				9
373				0		no		no	organ				3 50				10
286				0				no	none				4 00				12
356	5	356		0				no									12
214				0				no				1	3 00				18
280	0		*	0				no					3 50				15
81			*	0				no					*				12
60	0		*	0				no					4 80				11
325	0	325		0			4 00	no									12
356		356		0			6 00	yes				2					16
217			*	0				no					*				14
476		476	*	0			6 00	yes	organ				*				14
195	0		*	0				no	none				*				13
62	0		*	0				no					*				14
167			*	0	refuse			no					*				18
416	250 00	416		0		900	400	yes				2					12
448		448		0		yes	300	no					*				12
429		429		0		no		yes					*				7
96			*	0				no					*				12
143			*	0				no					*				12
325	5		3	0				no				1	3 50				22
374	0	374		0			5 00	yes									9
408			*	0				no				1	6 00				12
175			*	0				no					*				13
166	0		0	0				no					3 00				12

* Gives wages to parents and lives at home.

LABOR AND INDUSTRIAL STATISTICS.

TABLE No 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for	Cause for loss of time.	Wages received.
Cabinet-maker..	14	Michigan..	Holland..	s				first work	\$8 00 w
"	19	Holland..	"	s				shut down	8 00 "
Laborer.....	45	"	"	m	3	1		"	7 50 "
Cabinet-maker..	30	"	"	s				"	7 50 "
Laborer.....	58	"	"	m	6	0		"	7 50 "
Cabinet-maker..	19	"	"	s				no work	6 75 "
Laborer.....	38	"	"	m	4	1		"	8 00 "
Cabinet-maker..	38	"	"	m	1	1		"	7 50 "
"	18	Michigan..	"	s				first work	8 00 "
"	39	Holland..	"	m	0	0		no work	9 00 "
Laborer.....	48	"	"	m	4	1		"	8 25 "
"	40	"	"	m	3	4		no work	8 25 "
"	25	"	"	m	1	0		"	8 25 "
Cabinet-maker..	16	"	"	s				"	8 75 "
"	37	"	"	m	0	0		"	7 50 "
"	17	"	"	s				"	8 00 "
Laborer.....	42	"	"	m	0	0		"	8 00 "
Cabinet-maker..	15	"	"	s				school	8 75 "
Saw-filer.....	33	New York..	Germany..	m	0	0		"	12 00 "
Fireman.....	39	Michigan..	U. S.....	m	4	2		"	9 00 "
Laborer.....	33	Illinois..	"	s				"	7 50 "
Lumber inspect'r	40	Scotland..	Scotland..	m	6	3		"	2 50 d
Machine hand..	28	Vermont..	England..	s				"	13 00 w
Machinist.....	30	Kentucky..	U. S.....	m	1	1		"	18 00 "
Machine hand..	31	Michigan..	"	s				"	7 20 "
"	30	Poland..	Poland..	s				"	10 50 "
Laborer.....	31	Indiana..	Germany..	m	2	2		sickness	8 00 "
Fireman.....	44	Holland..	Holland..	m	4	0		"	9 00 "
Machine hand..	18	Michigan..	U. S.....	s				"	7 20 "
"	38	Indiana..	Germany..	m	6	2		"	10 50 "
Filler.....	40	Holland..	Holland..	w'r	2	0		shut down	7 50 "
Stainer.....	41	"	"	m	1	1		"	8 25 "
Finisher.....	30	Wisconsin..	Germany..	m	1	1		"	12 00 "
"	28	Holland..	Holland..	m	0	0		no work	9 00 "
"	38	"	"	m	1	1		shut down	8 25 "
"	56	"	"	m	6	1		"	8 00 "
"	25	"	"	s				"	8 00 "
"	31	New York..	U. S.....	s				shut down	10 00 "
"	19	Michigan..	"	s				"	7 50 "
Car logger.....	32	Holland..	Holland..	m	4	1		"	10 50 "
Finisher.....	28	Russia..	Russia..	s				"	9 00 "
"	33	Michigan..	Germany..	s				"	10 50 "
Sander.....	15	Germany..	"	s				first work	8 30 "
Filler.....	32	Holland..	Holland..	m	1	0		shut down	8 25 "
Finisher.....	38	"	"	m	2	0		"	10 00 "
"	39	"	"	m	3	1		"	9 00 "
"	38	"	"	m	3	0		ret work in U. S.	8 25 "
"	31	"	"	m	2	0		shut down	9 00 "
"	38	"	"	m	3	2		"	9 00 "
"	40	Michigan..	U. S.....	w'r	5	3		"	9 00 "
Foreman.....	29	Holland..	Holland..	m	3	1		"	10 50 "
Finisher.....	33	Russia..	Russia..	s				"	9 00 "
"	30	Michigan..	Germany..	m	1	0		"	11 00 "
"	32	Germany..	"	m	4	0		"	9 00 "
"	32	Holland..	Holland..	m	1	0		"	9 00 "

TABLE No. 1—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank	Do you own your home, its value.	If mortgaged, for what amount	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
318			*	0	no			no	none						9
312			0	0	no			no	"						15
874		\$374	* 0	0	\$325	\$800		yes	"	8	\$3 00				15
874			0	0	no			no	"		*				15
890		890	0	0	no			yes	"						13
322			0	0	"			no	"		3 25				12
312	0	312	0	0	700	300		yes	"	1					11
390		390	0	0	1,100			no	"		*				12
53			* 0	0	no			no	"						15
429	\$18	429	0	0	no		\$5 00	yes	"	1					16
429		429	0	0	"		7 00	"	"	1					15
373	125	367	0	0	1,100	500		"	"	1	1				11
398		308	0	0	no		5 00	"	"	1					10
179			* 0	0	no			no	accord'n		*				14
367	0	367	0	0	800	200		no	none	1					10
298			*	0	no			"	"						14
416	500	416	* 0	0	1,100			"	"	1					14
95			0	0	no			"	"		*				12
624		500	\$124	0	1,400	refuse		yes	"	1		\$2,000			16
648		680	0	0	no		10 00	"	"	1	1	1,000	1	\$5 00	15
390			75	0	"			no	"		3 50				16
780	100	780	0	0	1,500	600		yes	"	1	1	1,000			16
624		624	0	0	no			yes	"	1	4 80	2,000			17
780		600	180	0	1,200			yes	flute	1		2,000			19
374			0	0	no			no	none		4 00				15
546	40	546	0	0	"		8 00	no	"		1				14
346		346	0	0	1,100	300		yes	"			2,000	1	8 00	16
718	60	700	0	0	1,300	300		"	"		1				15
374			0	0	no			no	"		4 00				16
726		600	126	0	"		9 00	no	"	1	1	1,000	1	5 00	18
325	0	200	125	0	"		4 00	yes	"						15
368	0	357	0	0	600	500		"	"		1				12
572		400	172	0	900			"	organ	1		1,000			8
351	0	351	0	0	no		4 50	no	none	1					15
396	0	394	0	0	"		6 00	"	"						17
391	0	381	0	0	500	200		"	"						15
468			0	0	no			"	"		2	5 00			17
175			0	0	"			"	"	1		4 00			19
357			0	0	"			"	"	1		5 00			16
536	0	523	0	0	800	400		yes	"						10
429	0		0	0	no			no	"		3 50				15
546			0	0	"			no	"	1	5 00				11
6			*	0	"			"	"		*				15
322	0	323	0	0	900	700		yes	"						14
433	100	433	0	0	no		6 50	no	"	1					15
390	0	390	0	0	750	500		yes	"						14
250	800	250	0	0	1,200	400		"	"	1					12
390	0	390	0	0	no		6 00	no	"						17
390	0	390	0	0	1,000	450		yes	organ	1					14
429		429	0	0	no			no	none		3 00				15
500	0	500	0	0	780	550		yes	"	2		400	1	5 00	17
429	0		0	0	no			no	"		3 50				15
476		476	0	0	"		6 00	"	"	1					12
429	0	429	0	0	"		6 00	yes	"			600	1	3 00	15
390	0	390	0	0	400			no	"	1					9

* Gives wages to parents and lives at home.

LABOR AND INDUSTRIAL STATISTICS.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Finisher	15	Germany	Germany	s	0	18	11	11	not in U. S.	23 50
"	28	Wisconsin	"	m	2	1m	7	11	no work	12 00
"	34	Michigan	U. S.	m	1	1	11	28	shut down	11 00
"	28	Holland	Holland	s	0	8	11	28	"	9 00
"	57	Germany	Germany	m	3	4	10	52	"	8 00
Sander	18	"	"	s	0	2	11	26	"	4 20
"	16	Minnesota	"	s	0	1m	1	11	first work	2 30
Filler	49	Germany	"	m	0	7	9	78	shut down	9 00
Finisher	18	New York	"	s	0	1	11	26	"	4 20
"	55	Germany	"	m	3	4	11	26	"	7 50
Sander	16	England	England	s	0	1	11	26	"	3 00
Filter	44	Germany	Germany	m	0	9	10	52	"	1 15
"	42	Holland	Holland	wr	4	6	10	53	"	6 00
"	44	"	"	m	4	3	10	53	"	3 00
Finisher	23	Wisconsin	U. S.	s	0	4	11	26	"	11 00
Foreman	29	Holland	Holland	m	6	7	11	18	"	9 00
Cabinet-maker	40	"	"	wr	3	6	11	26	"	9 00
Machine-hand	28	"	"	m	2	6	11	18	"	8 25
Cabinet-maker	14	"	"	s	0	3	9	78	school	2 75
Laborer	58	"	"	m	5	7	11	18	shut down	7 50
Machine-hand	38	"	"	m	3	1	11	18	"	7 50
Cabinet-maker	38	"	"	m	3	1w	11	18	"	7 50
Machine-hand	14	"	"	s	0	1	11	18	shut down	2 10
"	25	"	"	wr	0	1	11	18	"	6 00
Cabinet-maker	24	"	"	s	0	1	6	18	not in U. S.	5 00
Machine-hand	18	"	"	s	0	1	11	18	shut down	3 20
Foreman	30	"	"	m	3	2	11	18	"	12 00
Machine-hand	17	"	"	s	0	2	11	18	shut down	4 00
Cabinet-maker	53	"	"	s	0	17	10	53	no work	6 00
"	31	"	"	m	3	3	11	18	shut down	7 50
Laborer	42	"	"	m	5	6	11	18	"	7 50
Carver	17	"	"	s	0	2	11	18	"	4 10
Machine-hand	15	"	"	s	0	1	9	18	not in U. S.	3 10
Laborer	48	"	"	m	6	5	11	18	shut down	7 50
Machine-hand	44	"	"	m	3	5	11	18	"	7 30
Laborer	31	"	"	m	6	6	11	18	"	9 00
Cabinet-maker	29	"	"	m	3	4	9	72	no work	6 00
Machine-hand	13	"	"	s	0	1	11	18	shut down	5 10
Carver	17	"	"	s	0	1	10	52	"	3 60
Machine-hand	19	"	"	s	0	1	12	18	"	6 00
Cabinet-maker	15	Michigan	"	s	0	1	11	18	shut down	2 00
"	14	"	"	s	0	1	11	18	"	2 25
Machine-hand	12	"	"	s	0	1	6	18	first wrk	2 10
Laborer	32	Holland	"	m	6	2	11	18	"	7 50
Carver	19	Michigan	"	s	0	4	11	18	shut down	6 40
Machine-hand	19	Holland	"	s	0	1	6	18	first wrk in U. S.	5 20
"	15	"	"	s	0	3	11	18	shut down	4 50
Carver	18	"	"	s	0	3	11	18	"	4 30
"	14	Michigan	"	s	0	2	11	18	"	2 90
"	19	Holland	"	s	0	1	6	18	first wrk in U. S.	4 20
Cabinet-maker	43	"	"	m	3	3	11	18	shut down	10 50
Machine-hand	15	"	"	s	0	1	11	18	"	2 30
Laborer	38	"	"	m	2	2	11	18	"	7 50
Cabinet-maker	19	"	"	s	0	1	11	18	"	6 00
"	23	"	"	s	0	1	12	18	"	6 00

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
965			*	0	no			no	none				*				15
980		\$380	0	0	"			yes	"	1							9
528		528		0	"		\$7.00	no	"	1	1						18
439	0			0	"			no	"				\$4.00				15
848	0	848	0	0	\$800	\$300		yes	"	1	1				1	\$5.00	15
200			*	0	no			no	"				*				14
18				0	"			"	"				*				15
851		800	\$51	0	1,500	600		yes	"		2			\$1,000			15
200				0	no			no	"				*	200			13
857	0	857	0	0	"		5.50	yes	"		1						15
172		172		0	"			no	"				3.00				15
800	0	800	0	0	1,800	200		yes	"					1,750	1	5.00	16
260	0	260	0	0	700	500		"	"								14
260	0	260	0	0	no		5.00	"	"		1	1		90			15
528				0	"			no	"	1	1		5.00				18
448	0	450	0	0	"			5.50	yes								16
439	0	429	0	0	"			6.00	"								12
411	0	412		\$1,200	"			5.00	no	organ			*				12
107			*	0	"				none								11
878		875	0	0	"		7.00	yes	"		3						10
373	\$10.00	375	0	0	"		4.00	no	"		2						13
373		374	0	0	"		4.00	"	"								10
105			*	0	"			"	"								13
299			0	0	"			"	"				3.00				13
180			0	0	"			"	"				3.25				9
165			*	0	"			"	"				*				11
624		624	0	0	400	350		yes	"	1	6		*				14
200			*	0	no			no	"				*				13
260	8.00		0	0	4,000	1,400		no	organ	1	2		3.00				13
373		375	0	0	no		6.00	yes	none	1	1						13
498		375	0	0	"		5.00	"	"	1	6						17
204			*	0	"			"	"				*				11
82	0		*	0	"			no	"				*				10
373		375	0	0	1,000	700		yes	"		1						10
528	0	530	0	0	800	550		no	"		1						13
448		450	0	0	no			yes	"		2						16
240	20.00	241	0	0	"		5.00	"	organ								13
254			0	0	"			no	none		2		3.00				14
151			*	0	"			"	"				*				16
848			*	0	"			"	organ		2		*				13
150			*	0	"			"	none				*				12
112			*	0	"			"	"				*				13
54			*	0	"			"	"				*				12
390	0	390	0	0	"		5.00	yes	"	1	6						10
319			*	0	"			no	"				*				11
191			0	0	"			"	"				3.00				12
224			*	0	"			"	"				*				9
244	0		0	0	"			"	"				3.00				13
144			*	0	"			"	"				*				12
100	0		*	0	"			"	"				*				12
773		775	0	0	yes	900		yes	"		1						10
140			*	0	no			no	"				*				12
373	0	374	0	0	800	200		"	"				*				12
299	0		*	0	no			"	"				*				12
312			0	0	"			"	"		1		3.50				9

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Steiner.....	31	Holland.....	Holland.....	m	1	0	0	3	7	75	75	shut down	\$9 00 w
Finisher.....	26	Canada.....	Canada.....	m	1	0	0	1	1	25	25	"	11 00 "
".....	32	Poland.....	Poland.....	m	1	0	0	1	1	25	25	"	8 35 "
".....	31	Holland.....	Holland.....	m	0	0	1	0	0	25	25	"	9 00 "
".....	28	".....	".....	m	0	0	1	0	0	25	25	"	9 00 "
".....	35	England.....	England.....	w'r	0	0	0	4	4	25	25	"	11 00 "
Machine-hand.....	30	Michigan.....	U. S.....	s	1	0	0	1	1½	25	25	"	8 40 "
Foreman.....	30	".....	".....	s	1	0	0	1	4	12	12	"	9 00 "
Laborer.....	42	Holland.....	Holland.....	m	12	6	12	5	4	25	25	"	9 00 "
Machine-hand.....	46	New York.....	U. S.....	m	2	0	3	3	1	25	25	"	9 00 "
Sawyer.....	33	".....	Holland.....	m	4	2	5	5	2½	25	25	"	10 50 "
Carpenter.....	32	Michigan.....	U. S.....	m	1	1	1	15	3	7	7	sickness	15 00 "
".....	55	New York.....	".....	m	5	1	0	25	1	12	12	shut down	9 00 "
Teamster.....	22	Scotland.....	Scotland.....	s	0	1	0	1	1	12	12	voluntarily	8 50 "
Lumber-piler.....	35	Holland.....	Holland.....	m	6	2	0	1	1	25	25	shut down	7 50 "
Teamster.....	39	".....	".....	m	4	2	5	3	3	25	25	"	7 50 "
Laborer.....	43	".....	".....	m	5	3	0	5	5	12	12	voluntarily	7 50 "
".....	64	".....	".....	m	8	0	9	10	10	25	25	shut down	9 00 "
".....	24	Poland.....	Poland.....	m	0	0	1	1	1	25	25	"	7 50 "
Carpenter.....	38	Holland.....	Holland.....	m	3	2	4	½	½	25	25	not in U. S.	7 50 "
Sawyer.....	37	Michigan.....	U. S.....	s	1	1	0	3	2	25	25	shut down	15 00 "
Foreman.....	30	".....	Holland.....	m	4	1	5	1	17	12	12	"	12 00 "
Teamster.....	30	Holland.....	".....	m	1	0	2	2	2	25	25	"	7 50 "
".....	50	Germany.....	Germany.....	m	3	0	4	12	12	25	25	"	9 00 "
".....	41	Ohio.....	U. S.....	m	1	1	2	1	1	25	25	"	9 00 "
".....	34	Holland.....	Holland.....	m	2	0	4	5	5	25	25	sickness	8 40 "
Lumber-piler.....	47	".....	".....	m	7	2	3	1	2	25	25	shut down	9 00 "
".....	36	".....	".....	m	3	1	4	3	2	25	25	"	9 00 "
Teamster.....	30	".....	".....	m	3	0	4	3	3	25	25	"	8 40 "
Laborer.....	42	".....	".....	m	5	3	6	2	2	25	25	"	7 50 "
".....	51	".....	".....	m	6	1	7	7	1	12	12	voluntarily	7 50 "
".....	38	".....	".....	w'r	3	1	3	1	1	25	25	shut down	7 50 "
Machine-hand.....	21	Germany.....	Germany.....	s	1	0	0	3½	1	12	12	"	9 00 "
Yardman.....	17	".....	".....	s	1	0	0	1	5	104	104	no work	4 00 "
Machine-hand.....	34	Sweden.....	Sweden.....	m	4	0	5	2	2	25	25	shut down	7 50 "
Laborer.....	36	".....	".....	m	3	1	3	2	2	12	12	sickness	7 50 "
Machine-hand.....	25	".....	".....	m	1	0	1	2	2	25	25	shut down	6 00 "
Band sawyer.....	29	Germany.....	Germany.....	m	2	0	3	7	7	52	52	"	8 10 "
Carver.....	42	".....	".....	m	2	2	3	22	2½	11½	11½	"	8 75 d
".....	23	Scotland.....	Scotland.....	s	1	0	0	5m	5m	11½	11½	holidays	6 00 w
Sawyer.....	21	Sweden.....	Sweden.....	s	1	0	0	1	1	25	25	shut down	6 00 "
Laborer.....	16	".....	".....	s	1	0	0	½	½	25	25	first work in U. S.	3 00 "
Carver.....	30	Michigan.....	U. S.....	m	1	1	2	15	2½	12	12	"	3 30 d
Laborer.....	25	Sweden.....	Sweden.....	s	1	0	0	2	2	25	25	shut down	8 00 w
Sawyer.....	30	".....	".....	s	1	0	0	3	3	25	25	"	8 40 "
".....	28	".....	".....	s	1	0	0	1½	1½	10	10	"	7 50 "
".....	30	Germany.....	Germany.....	m	0	0	1	7	7	10½	10½	"	8 25 "
Machine-hand.....	30	Sweden.....	Sweden.....	m	1	1	2	2	8	10	10	"	9 00 "
Carver.....	15	Germany.....	Germany.....	s	1	0	0	1	1	10	10	sickness	3 00 "
".....	38	New York.....	U. S.....	m	1	0	2	16	½	11	11	no work	18 00 "
Cabinet maker.....	37	Holland.....	Holland.....	m	4	2	5	10	12	12	12	shut down	1 75 d
Laborer.....	37	Sweden.....	Sweden.....	m	3	0	4	5	5	11	11	"	6 00 w
Sawyer.....	32	".....	".....	m	1	0	2	2	2	10	10	"	7 50 "
".....	42	".....	".....	m	6	4	7	7	8	11	11	"	9 00 "
Machine-hand.....	39	".....	".....	m	4	2	7	8	9	11	11	"	10 00 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
391	...	0	no	...	...	no	none	1	...	...	38 25	...	...	...	14
390	...	0	...	...	...	...	...	...	...	...	...	...	...	...	15
391	...	0	...	...	...	...	...	...	...	...	...	...	...	...	15
392	...	0	...	...	...	...	...	...	...	...	...	...	...	...	16
393	...	0	...	...	...	...	...	...	...	...	...	...	...	...	18
478	...	0	...	...	...	no	...	...	...	...	4 00	...	...	...	16
400	...	\$10	...	...	...	...	...	1	...	...	4 00	...	...	...	17
448	...	0	...	...	...	...	...	...	...	...	4 00	...	...	...	18
439	...	0	...	...	...	...	...	...	...	...	...	...	...	...	15
430	...	0	...	...	...	yes	organ	1	1	1	...	\$1,000	...	...	10
500	...	0	no	...	...	...	...	1	...	...	...	...	...	...	7
764	...	500	1,000	...	...	...	...	1	...	...	...	...	...	...	16
480	...	no	...	...	10 00	...	...	1	2	...	...	...	...	...	16
485	...	50	...	...	...	no	...	1	1	...	8 50	...	1	5 00	14
357	...	0	...	...	4 50	yes	...	...	...	...	...	...	...	...	18
357	...	0	700	\$700	...	...	...	...	...	...	...	...	...	...	15
375	...	0	400	800	...	...	...	...	1	1	...	...	...	...	15
490	...	0	no	...	9 00	...	...	...	1	1	...	...	...	...	15
357	...	0	...	...	3 00	no	...	...	...	...	...	...	...	...	15
308	...	0	...	...	5 00	...	...	...	...	...	...	...	...	...	18
715	...	250	...	...	...	...	...	1	1	...	4 50	...	3	10 00	19
598	...	0	1,500	...	...	yes	organ	1	...	...	...	2,000	...	...	13
357	...	0	700	600	...	no	none	...	...	...	...	...	...	...	15
439	...	0	1,500	500	...	...	...	...	1	...	...	...	...	...	8
400	...	300	no	...	8 00	yes	...	1	3	...	...	500	2	10 00	14
388	...	0	800	635	...	...	...	...	1	1	...	...	...	...	14
439	...	0	1,500	400	...	...	...	...	...	...	...	...	...	...	11
480	...	0	no	...	5 00	...	...	...	...	...	...	...	...	...	13
400	...	0	...	...	6 00	...	organ	...	...	...	...	...	...	...	16
357	...	0	550	...	...	...	none	...	...	...	...	...	...	...	15
374	...	0	no	...	6 00	...	...	...	1	...	...	...	...	...	10
357	...	0	...	...	5 00	no	...	...	...	...	...	...	...	...	15
450	...	0	...	...	...	...	...	...	...	...	4 00	...	...	...	15
138	...	0	...	...	...	...	...	...	...	...	...	...	...	...	13
357	...	0	...	...	4 00	yes	...	...	1	...	...	...	...	...	16
374	...	0	...	...	6 00	no	...	...	...	1	...	...	...	...	13
300	...	0	...	...	4 00	yes	...	...	1	1	...	...	...	...	13
351	...	0	...	...	5 00	...	...	...	1	1	...	...	...	...	14
1,131	...	0	2,000	350	...	...	...	2	1	2	...	3,000	1	3 00	14
350	...	0	no	...	...	no	piano	1	2	...	4 50	...	...	...	14
286	...	0	...	...	...	...	...	...	...	...	3 00	...	...	...	12
110	...	0	...	...	...	...	...	...	...	...	...	...	...	...	16
1,039	...	0	...	...	...	yes	organ	1	1	...	...	...	1	5 00	16
359	...	0	...	...	...	no	none	...	...	...	3 00	...	...	...	13
400	...	0	...	...	...	...	...	...	1	...	...	...	...	...	15
325	...	0	...	...	...	...	...	...	...	...	3 50	...	...	...	10
375	...	0	775	...	...	yes	...	...	1	...	...	600	1	3 00	14
416	...	0	no	...	6 00	...	...	...	1	...	...	...	...	...	13
180	...	0	...	...	...	no	...	...	...	...	...	...	...	...	14
359	...	0	...	...	8 00	yes	...	1	1	...	...	...	1	5 00	13
546	...	0	800	400	...	...	...	...	1	1	...	...	...	...	10
236	...	0	no	...	5 00	no	...	...	1	1	...	...	...	...	16
395	...	0	...	...	5 00	yes	...	...	1	1	...	...	...	...	8
430	...	0	500	200	...	...	...	1	1	...	...	2,000	...	...	13
478	...	0	700	...	...	...	...	...	2	...	...	...	...	...	14

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present em.	Cause for loss of time.	Wages received.
Sawyer.....	32	Sweden.....	Sweden.....	m	2	0	3	3	3	ut down	\$7 50 w
.....	33	".....	".....	m	2	1	3	7	3	"	9 00 "
Machinist.....	31	Germany.....	Germany.....	s	.....	.....	0	3	3	"	8 00 "
Turner.....	25	Poland.....	Poland.....	s	.....	.....	0	7	.....	"	7 50 "
Band sawyer.....	19	Sweden.....	Sweden.....	s	.....	.....	0	1	.....	wrk in U. S.	3 30 "
Machinist.....	.....	".....	".....	s	.....	.....	0	3	3	ut down	6 00 "
Carver.....	.....	many.....	many.....	s	.....	.....	0	3	3	"	5 00 "
Laborer.....	.....	and.....	and.....	s	.....	.....	0	3	3	"	8 00 "
Carver.....	.....	S.....	S.....	m	6	4	7	21	.....	"	10 30 "
Machine-h.....	.....	den.....	den.....	s	.....	.....	0	1	.....	"	4 00 "
Machinist.....	.....	".....	".....	s	.....	.....	0	3	3	"	6 00 "
Sawyer.....	.....	".....	".....	m	1	0	3	7	.....	"	9 00 "
Machine-h.....	.....	nia.....	nia.....	s	.....	.....	0	1	.....	"	3 00 "
Sawyer.....	.....	den.....	den.....	m	3	0	4	8	.....	"	7 50 "
Inspector.....	.....	".....	".....	m	0	0	1	3	.....	"	3 00 "
Laborer.....	.....	and.....	and.....	s	.....	.....	0	10w	10	rst work	3 40 "
Machinist.....	.....	many.....	many.....	m	1	1	3	7	.....	ut down	7 30 "
Sawyer.....	.....	den.....	den.....	m	6	1	5	3	.....	"	7 50 "
Carver.....	.....	many.....	many.....	s	.....	.....	0	3w	.....	rst work	2 40 "
.....	.....	".....	".....	s	.....	.....	0	7	.....	.....	3 30 d
Finisher.....	.....	".....	".....	s	.....	.....	0	.....	.....	ickness	2 40 w
.....	18	".....	".....	s	.....	.....	0	2	.....	ut down	7 50 "
.....	30	Russia.....	Russia.....	m	4	1	0	4	.....	"	11 00 "
Packer.....	28	Holland.....	Holland.....	m	1	0	3	3	1m	in U. S.	8 10 "
.....	.....	".....	".....	s	.....	.....	0	1m	.....	"	7 50 "
Sander.....	16	Michigan.....	".....	s	.....	.....	0	1	.....	rst work	3 00 "
Varnisher.....	16	".....	Germany.....	s	.....	.....	0	2	.....	ut down	5 10 "
Finisher.....	23	Holland.....	Holland.....	s	.....	.....	0	6	.....	"	11 00 "
.....	23	Michigan.....	U. S.....	m	1	0	3	7	.....	"	11 00 "
.....	23	Holland.....	Holland.....	m	0	0	1	3	.....	"	11 00 "
.....	52	New York.....	U. S.....	m	1	1	2	16	.....	"	7 90 "
Varnisher.....	23	Germany.....	Germany.....	s	.....	.....	0	3	.....	"	10 50 "
Finisher.....	23	Michigan.....	".....	m	2	0	3	12	1	"	11 00 "
.....	21	".....	U. S.....	s	.....	.....	0	4	.....	"	11 00 "
Varnisher.....	33	Holland.....	Holland.....	m	3	1	4	10	.....	"	10 00 "
Finisher.....	26	Michigan.....	Germany.....	m	1	0	2	12	.....	"	10 00 "
Sander.....	17	Germany.....	".....	s	.....	.....	0	4	.....	"	5 10 "
Laborer.....	40	Holland.....	Holland.....	wr	3	1	3	8	.....	"	7 50 "
Teamster.....	54	Germany.....	Germany.....	m	7	1	3	13	10	"	3 25 "
Sander.....	16	".....	".....	s	.....	.....	0	3	.....	"	4 30 "
Finisher.....	20	Penn.....	U. S.....	m	2	0	3	3	.....	.....	10 00 "
Varnisher.....	31	Holland.....	Holland.....	m	5	0	3	3	.....	ut down	10 00 "
Sander.....	15	Canada.....	Canada.....	s	.....	.....	0	2w	.....	wrk in U. S.	3 00 "
.....	16	Michigan.....	Holland.....	s	.....	.....	0	1	.....	rst work	3 00 "
Finisher.....	34	Holland.....	".....	m	5	3	6	10	.....	ut down	11 00 "
.....	32	".....	".....	m	4	0	5	3	.....	"	10 00 "
Varnisher.....	23	".....	".....	s	.....	.....	0	4	.....	"	10 00 "
.....	21	Germany.....	Germany.....	s	.....	.....	0	3	.....	"	10 00 "
.....	31	Ohio.....	U. S.....	m	2	0	3	10	.....	"	10 00 "
.....	19	Germany.....	Germany.....	s	.....	.....	0	2	.....	"	5 10 "
.....	33	Holland.....	Holland.....	m	3	0	4	3	.....	"	3 00 "
Foreman.....	34	Michigan.....	U. S.....	s	.....	.....	0	4	.....	untary	15 00 "
Finisher.....	41	Holland.....	Holland.....	m	4	1	5	10	.....	ut down	12 00 "
.....	19	Michigan.....	".....	s	.....	.....	0	5	.....	no work	10 50 "
.....	32	Holland.....	".....	m	3	1	7	15	.....	ut down	11 00 "

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$357	\$135	\$337	0	0	no	.....	\$5 00	yes	none	Daily papers.	Weekly papers.	Magazines.					15
429	200	350	73	0	\$1,200	.....		no	"	1	1						16
398	0		0	0	no	.....		no	"				\$3 50				16
357	0		0	0	no	.....		no	cornet		1		4 00	\$50 00	1	\$5 00	12
75	0		* 0	0	no	.....		no	none				* 0			4 00	18
314	0		* 0	0	no	.....		no	"				3 00				16
249	0		* 0	0	no	.....		no	"	1	1		3 50				14
314	0		0	0	2,500	.....		yes	piano	1	1	2	3 50	5,500	2	5 00	15
729	739		0	0	no	.....		no	none				3 00				16
300	30		0	0	no	.....		no	"				3 00				13
296	0		0	0	no	.....		no	"				3 00				15
416	0	418	0	0	700	.....		yes	"		1		3 00				15
143	0		* 0	0	no	.....		no	"				*				11
325	35	360	0	0	500	\$400		yes	"		1						10
398	0	325	0	0	no	8 50		no	organ		1			1,000			15
28			* 0	0	no	.....		no	none				*				12
398	25	900	0	0	750	150		yes	"		1			600	2	6 00	12
357	0	357	* 0	0	600	.....		no	"		1						14
7			* 0	0	no	.....		no	"				*				14
955		refuse		0	no	.....		no	"	1	1		4 50		1	5 00	12
120			* 75	75	no	.....		no	violin				*				14
357			0	0	no	.....		no	none		1		4 00				15
524			0	0	500	400		yes	"				5 00				14
351	0	350	0	0	no	5 00		no	"		1						18
325	0	250	107	0	no	.....		no	"								15
78			0	0	no	.....		no	"				2 00				15
243			0	0	no	.....		no	"				4 00				12
524			0	0	no	.....		no	"		1		4 00				16
524		524	0	0	no	5 00		yes	"								16
476		478	0	0	no	7 00		no	"		1						12
376		350	0	0	no	.....	6 00	no	"		1						16
476			0	0	no	.....	5 00	no	"				6 00		1	5 00	19
524		524	0	0	no	700		yes	"								16
524			200	40	no	500	400	no	guitar		1	1	4 00				17
438		432	0	0	no	500		yes	none		1			200			10
476		475	0	0	no	.....	7 00	no	"			2					14
243			0	0	no	.....	600	no	"				3 50				13
357	0	357	0	0	600	600		yes	"								15
398	100	394	* 0	0	2,000	.....		no	organ		2						14
200			* 0	0	no	.....		no	none				*				14
524		518	0	0	no	.....	8 00	yes	"	1							15
428	0	422	* 0	0	1,000	600		no	"		2	1					9
19			0	0	no	.....		no	"				*				15
41			* 0	0	no	.....		no	"								15
476		476	0	0	1,000	.....		yes	"		1						18
476	0	475	0	0	no	500		no	"		1						12
476			0	0	no	.....		no	"				7 00				17
428	0		0	0	no	.....	8 00	yes	"		2		4 00		1	5 00	14
476		475	0	0	no	.....		no	"								15
243	0		0	0	no	.....		no	"				4 00				15
381	400	331	50	0	1,500	750		yes	"								15
747			0	0	no	.....		no	"	1			5 00				16
572	0	500	72	0	600	.....		yes	"								15
455			0	0	no	.....		no	"		1		4 00				15
524	400	500	24	0	1,500	.....		yes	"		2	1		1,000			15

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.
867	0	0	0	0	no	
857	0	0	0	0	no	
584	0	0	0	0	\$1,100	950
478	0	0	0	0	no	
881	0	0	0	0	900	400
868	0	0	0	0	2,500	600
452	0	0	0	0	no	
780	0	0	0	0	2,500	
893	925	0	94	0	no	
200	5	0	0	0	"	
1,200	5	1	0	0	"	
1,045	0	0	945	0	2,000	
408	0	0	0	0	no	
148	0	0	0	0	"	
374	0	0	0	0	"	
448	200	0	148	0	"	
880	0	0	0	0	"	
430	85	0	78	78	"	
411	2	0	0	0	"	
430	10	0	100	0	"	
881	55	0	174	0	1,350	500
538	10	0	128	200	no	
888	0	0	0	0	"	
874	0	0	0	0	"	
411	15	0	100	100	"	
196	120	0	0	0	"	
448	5	0	200	200	"	
524	50	0	78	0	"	
430	0	0	178	0	900	400
477	0	0	0	0	900	500
408	150	0	0	0	no	
306	0	0	0	0	"	
747	50	0	47	0	2,000	
149	0	0	0	0	no	
850	0	0	0	0	"	
747	0	0	197	800	2,000	
306	0	0	0	0	no	
149	0	0	0	0	"	
373	15	0	0	0	"	
476	0	0	100	0	"	
457	75	0	0	0	"	
809	0	0	0	0	"	
1,088	0	1	0	0	2,000	500
408	0	0	0	0	no	
828	1,000	0	126	0	2,000	
130	25	0	0	0	no	
240	0	0	50	0	"	
234	100	0	0	0	"	
825	80	0	0	0	"	
108	0	0	0	0	"	
1,180	0	0	80	200	2,000	refuse
1,002	100	0	842	0	2,200	
842	0	0	0	0	800	
880	0	0	0	0	no	
890	0	0	0	0	"	

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	Cause for loss of time.	Wages received.
Machine hand	30	Vermont	England	s			0	2	1		\$12 00 w
"	28	Holland	Holland	s			0	2	1		8 00 "
Foreman	28	N. J.	U. S.	s			0	2	1		15 00 "
Steam-fitter	31	New York	England	s			0	11	1		13 00 "
Laborer	28	Michigan	U. S.	s			0	11	1		7 50 "
"	35	Sweden	Sweden	m	4	1	5				7 50 "
Sawyer	22	Kentucky	U. S.	s			0	1	1		7 20 "
Machinist	34	Penn.	"	m	1	1	2	8	1		14 40 "
Marker	15	Holland	Holland	s			0	1½	1		2 70 "
Teamster	32	Mass.	U. S.	s			0	7	1		9 00 "
Machine hand	35	Illinois	"	m	2	1	4	4	1		9 00 "
"	37	Michigan	England	s			0	8	1		12 00 "
Carver	16	Germany	Germany	s			0	½	1	first work	8 50 "
"	16	Michigan	U. S.	s			0	1½	1	shut down	4 80 "
"	29	"	"	m	0	0	1	½	1	"	6 00 "
"	25	Germany	Germany	m	0	0	1	5	4	sickness	17 50 "
"	30	Illinois	Ireland	m	0	0	1	12	10	strike, no wrk, sick	14 80 "
"	15	Germany	Germany	s			0	1½	1	shut down	2 90 "
Stamping	16	"	"	s			0	2m	2	first wrk in U.S.	2 60 "
Sawyer	37	Ohio	"	m			1	20	2	injured	9 00 "
Machinist	24	Canada	Canada	s			1	8	3	shut down	7 50 "
Carver	16	Michigan	Germany	s			0	1½	1	"	2 40 "
Filler	35	New York	U. S.	m	0	0	1	2	3	"	9 00 "
Foreman	25	Ohio	Germany	s			0	9	4	"	15 00 "
Machinist	43	"	U. S.	m	2	2	3	10	1	other business	10 20 "
Planer	44	Maryland	"	s			0	1	1	shut down	7 50 "
Finisher	23	Sweden	Sweden	m	1	0	2	4	1	"	11 00 "
Painter	24	"	"	s			0	1m	1	not in U. S.	8 25 "
Filler	26	Poland	Poland	m			1	4	4	shut down	9 00 "
Finisher	23	Sweden	Sweden	s			0	1m	1	not in U. S.	8 25 "
Planer	30	Germany	Germany	m	1	0	2	2	1	shut down	7 50 "
Laborer	16	"	"	s			0	5m	1	not in U. S.	2 80 "
"	23	Poland	Poland	s			0	½	1	"	4 20 "
Finisher	24	Norway	Norway	s			0	2m	1	no work	9 00 "
"	27	Sweden	Sweden	m			1	2m	1	"	8 25 "
Cabinet-maker	30	Michigan	Germany	m	1	0	2	12	1	shut down	10 50 "
Finisher	34	Holland	Holland	m	4	4	5	3	1	"	9 00 "
"	25	Sweden	Sweden	m	1	0	2	1	1	"	9 00 "
"	25	Germany	Germany	m	1	0	2	2½	1	"	9 00 "
"	23	Canada	Canada	m	0	0	1	1m	1	"	8 25 "
Filler	23	Russia	Russia	s			0	2	1	shut down	9 00 "
Finisher	23	Sweden	Sweden	m	4	1	5	4m	4	"	8 25 "
Sawyer	34	Germany	Germany	m	0	0	1	4	4	shut down	7 50 "
Laborer	18	"	"	s			0	1	1	"	4 00 "
Stainer	24	Poland	Poland	s			0	1	1	"	6 00 "
Finisher	26	Sweden	Sweden	m	7	0	8	1	1	"	8 00 "
Machine hand	44	Germany	Germany	m	4	3	5	8	6	"	7 50 "
Finisher	30	Denmark	Denmark	m	1	0	2	3	2	"	10 00 "
Machine hand	45	Germany	Germany	m	0	0	1	7	1	"	7 50 "
Finisher	30	Sweden	Sweden	m	0	0	1	3	1	"	11 00 "
"	15	Michigan	Poland	s			0	1½	1	"	3 30 "
Filler	45	Germany	Germany	m	9	2	10	8	2	"	9 00 "
Sawyer	21	Austria	Austria	s			0	2	1	"	5 20 "
Carver	31	Indiana	Ireland	s			0	15	1	"	2 80 d
Finisher	23	Sweden	Sweden	m	0	0	1	3½	2	shut down	11 00 w

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$324			\$100	\$400	no			no	none				\$4 00				16
416	\$40 00		0	0	"			"	"			1	3 50				13
730			0	0	"			"	"				3 50				15
624		\$499	125	400	"			"	violin	1	1		4 50				16
390			0	0	"			"					3 50				17
390		390	0	0	\$900			yes	none	1			\$1,000	1	\$5 00	14	
374			50	0	no			no	"				3 45				18
749		600	149	0	1,800	refuse		yes	"	1	1	1	1,000				17
140			0	0	no			no	"								14
468			50	150	"			"	flute				4 00				17
618		400	218	0	1,500	refuse		yes	none	1		1	1,000	1	5 00	18	
624			0	0	no			no	"				4 00				19
91			*	0	"			"	"				*				15
220			*	0	"			"	"				*				14
226		226	0	0	"		\$4 00	"	violin	1	2						17
834	0	834	0	0	"			"	none	1	1		8 00		1	5 00	17
858		858	0	0	"		18 00	yes	"	1			*		1	5 00	14
138			*	0	"			no	"				*				13
81			*	0	"			"	"				*				16
331		331	0	0	"		6 00	yes	"	1							13
357			0	0	"			no	horn	1			4 00				16
190			*	0	"			"	none				*				14
420			0	0	"			"	"	1			4 00				15
747			200	200	"			"	"				4 00		1	5 00	15
442		442	0	0	2,000	800		yes	"	1	1		2,000				15
357			0	0	no			no	"		1	1	4 00				16
524	0	524	0	0	"		8 00	yes	"		1		3 50				15
36			0	0	"			no	"				3 50				15
420	0	420	0	0	"		8 50	yes	"		1		3 50				14
36	0		0	0	"			no	"				3 50		1	5 00	15
357	0	257	100	0	"		8 00	"	"		1		*		1	3 00	14
50			*	0	"			"	"				*				16
109	0		0	0	"			"	"				3 00				15
195	0		0	0	"			"	"				3 50				15
357	0	357	0	0	"		6 00	yes	"		1						16
500		500	0	0	"		7 00	"	"	1			3,000	2	10 00	15	
429	0	800	129	0	"		6 00	"	"		1						15
429	0	400	29	0	"		5 00	no	"								15
390	0	390	0	0	"		6 00	"	"		1				1	8 00	15
429		150	280	0	"		5 00	"	violin								16
429	280 00	429	0	0	"			"	none				3 50				15
304	25 00	304	0	0	"		7 00	yes	"		1						15
357	20 00	325	22	0	850			no	"						1	3 00	12
191			0	0	no			"	"				3 00				17
226	0		0	0	"			"	"		1		3 00				15
381	0		0	0	"			"	"				3 50				15
357	0	357	0	0	400			yes	"						1	3 00	14
477	0	800	174	200	no		4 00	no	"		1				1	5 00	15
525	500 00	325	0	0	1,000	500		"	"						1	3 00	14
524	0	524	0	0	no		4 00	yes	"	1	1				1	5 00	15
157			*	0	"			no	"				*				13
429	0	429	0	0	2,500	1,500		yes	"		2		3 50	600	1	3 00	13
248	0		0	0	no			no	"				3 50				18
1,030			0	0	"			"	"				5 00	3,000	1	5 00	13
524	0	524	0	0	"		5 00	"	"	2					1	5 00	15

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Causes for loss of time.	Wages received.
Sander.....	14	Michigan	Holland	s	—	—	0	1m	1m	1	—	first work	83 80 w
Finisher.....	15	Germany	Germany	s	—	—	0	1	1	11	26	shut down	8 80 "
Filler.....	37	Denmark	Denmark	m	1	0	2	1½	1½	11	26	"	11 00 "
Laborer.....	38	Germany	Germany	m	2	1	4	5m	5m	5	—	first work in U. S.	7 50 "
Sander.....	17	Holland	Holland	s	—	—	0	1	1	11	26	shut down	3 80 "
Laborer.....	45	Germany	Germany	m	6	2	7	7	7	11	26	"	9 00 "
Finisher.....	39	Iowa	U. S.	w'r	0	0	0	3½	2½	11	26	"	11 00 "
Filler.....	55	Poland	Poland	m	6	1	7	1	1	11	26	"	7 50 "
Carver.....	30	England	England	s	—	—	0	15	8m	11½	13	holidays	3 88 d
Machine hand.....	19	Sweden	Sweden	s	—	—	0	½	½	9	—	not in U. S.	4 80 w
"	19	Germany	Germany	s	—	—	0	5	5	9	78	shut down	7 70 "
PHENIX FURNITURE CO.													
Laborer.....	15	Holland	Holland	s	—	—	0	5	5m	5	183	in school	40 d
"	18	Germany	Germany	s	—	—	0	1	1	11½	13	shut down	4 54 w
Veneerer.....	35	Poland	Poland	s	—	—	0	7	7	10	52	no work	1 50 d
Machinist.....	35	New York	U. S.	m	2	0	3	3	3	12	—	"	10 00 w
Machine hand.....	34	Michigan	Holland	m	1	0	3	20	4	11	26	no work	1 85 d
Veneering.....	46	Sweden	Sweden	w'r	2	0	2	35	18	12	—	"	3 00 "
Cabinet-maker.....	30	Germany	Germany	s	—	—	0	6	6	10	52	no work	1 25 "
"	30	Michigan	"	s	—	—	0	8	8	12	—	"	1 25 "
"	30	Holland	Holland	s	—	—	0	8	7	11½	13	no work	1 25 "
"	36	Germany	Germany	m	4	2	5	19	16	11	26	"	3 75 "
"	37	Holland	"	m	3	1	4	20	14	11	26	"	3 40 "
"	38	Michigan	Holland	m	1	0	2	8	1½	10½	39	"	1 75 "
"	18	Holland	"	s	—	—	0	4	4	12	—	"	5 50 w
Round-worker.....	58	"	"	m	9	8	6	1	1	11	26	no work	1 25 d
Filler.....	36	"	"	m	3	1	3	1	1	11	26	"	1 25 "
Foreman.....	35	"	"	m	3	2	5	16	16	12	—	"	3 00 "
Laborer.....	38	Germany	"	m	2	0	3	3	3	11	26	no work	7 50 w
Packer.....	38	Canada	Germany	m	5	2	6	½	½	12	—	"	1 75 d
Finisher.....	50	Holland	England	m	0	9	1	8	8	11	26	no work	8 00 w
"	28	"	Holland	m	1	0	3	1½	1½	10½	39	"	7 25 "
"	31	"	"	m	3	1	4	2½	2½	10	52	"	1 50 d
Dauber.....	47	"	"	m	6	0	7	4	4	11	26	"	1 35 "
Cabinet-maker.....	57	"	"	m	3	0	2	15	10	11	26	"	14 00 w
Repairer.....	26	New York	"	m	1	0	3	4	7	11	26	sickness	1 35 d
Turner.....	38	Scotland	U. S.	m	3	3	4	20	9	11½	13	no work	2 50 "
Cabinet-maker.....	31	Germany	"	s	—	—	0	6	4	11	26	"	1 50 "
"	30	New York	Germany	w'r	2	2	2	40	2½	11	26	"	1 25 "
"	31	Holland	U. S.	m	1	0	2	15	15	11	26	"	2 10 "
"	21	Michigan	Holland	s	—	—	0	3	3	11	26	"	1 50 "
Apprentice.....	14	"	"	s	—	—	0	½	1m	6	—	first work	2 70 w
Cabinet-maker.....	26	Holland	"	s	—	—	0	12	9	11	26	no work	2 10 d
"	23	Germany	"	s	—	—	0	8	7	11	26	"	1 70 "
Carver.....	37	Germany	"	m	2	0	3	20	8	10½	39	"	3 80 "
Machine hand.....	16	Michigan	U. S.	s	—	—	0	3	3	12	—	"	1 00 "
Carver.....	30	Denmark	Denmark	s	—	—	0	16	4m	11½	13	no work	8 80 "
Machine hand.....	39	Michigan	U. S.	w'r	0	—	0	2	10½	12	—	"	1 60 "
"	19	Holland	U. S.	s	—	—	2	7	6	12	—	"	1 50 "
Turner.....	40	Michigan	Holland	s	—	—	0	10	2w	12	—	"	1 75 "
Apprentice.....	30	Holland	U. S.	s	—	—	0	5	5	12	—	"	5 50 w
"	15	"	Holland	s	—	—	0	8m	8m	8	—	first work in U. S.	2 50 "

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$14			*	0	no			no	none		*				14
157			*	0	"			yes	"	1					14
524		\$524	0	0	"		\$8 00	yes	"	1		\$2,000			15
162	\$200	162	0	0	"		8 00	no	"						12
171			0	0	"			"	"						12
429	0	429	0	0	\$1,200	\$200		yes	"	1	2				15
524			0	0	no			no	violin			\$3 00		1	\$5 00
357	300	357	0	0	700			"	none	1	1			1	5 00
996	80		\$100	\$500	no			"	"	1	1	4 50			12
181	10		0	0	"			"	"	1	1	4 00			14
800			0	0	"			"	"						14
52			*	0	"			"	"			*			9
225			0	0	"			"	"			4 00			15
390			0	0	"		10 00	yes	"	1			2	9 00	14
520		520	0	0	"		10 00	"	"	1	1		2	5 00	18
529		500	11	50	"		10 00	"	"	1	1		2	5 00	14
156	0		0	0	2,500	900		no	"	1		4 00	\$2,500	3	10 00
335			0	0	no			"	"			4 00		1	4 00
390			0	0	"			"	"			3 00			14
373			*	0	"			"	"						12
786	0	786	0	0	1,200	200		yes	"	1		2,000			14
686	0	686	0	0	1,200	900		"	"		2			1	5 00
478		478	0	0	no		6 00	"	"					1	5 00
286			*	0	"			no	"			*			14
707	60	700	0	0	"		6 00	yes	"		1				8
367	0	850	0	0	"		5 50	no	"						10
936	0	600	200	0	1,900			yes	"	1	1	2,500	1	11 00	12
367	50	367	0	0	800			no	"		1			1	5 00
546	300	546	0	0	no		8 50	yes	"	1					20
381	0	360	0	0	"		5 00	no	"		1			1	5 00
380	50	325	5	0	500	225		yes	"	1		184	1	5 00	13
360	30	390	0	0	500			"	"	1	1				15
786	0	750	0	0	no		7 00	"	"		2	2,000	2	5 00	12
668	0	500	200	0	4,000	1,000		no	organ	1				1	5 00
386		386	0	0	no		6 00	no	none	1					12
747	0	750	0	0	"		8 00	yes	piano	1	1	1,000	1	5 00	12
429	0		*	0	"			no	none			*			15
302		357	0	0	"		6 00	yes	"					1	5 00
600		600	0	0	"		6 00	"	"		1				14
429			0	0	"			no	"			3 50		1	5 00
70			*	0	"			"	"			*			13
600			0	0	"			"	"			5 00		1	5 00
486			0	0	"			"	"			6 00		1	5 00
900	80	600	300	0	1,200	450		yes	"	2	4	2		1	5 00
312			0	0	no			no	"			*			13
986	0		0	0	"			"	"			4 00			14
499			100	100	"			"	"			4 00		1	5 00
458			0	0	"			"	"			*		1	5 00
546			225	600	"			"	"			4 00			12
286			*	0	"			"	"						14
87			*	0	"			"	"			*			14

*Gives wages to parents and lives at home.

LABOR AND INDUSTRIAL STATISTICS.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Machine-hand.	34	Germany	Germany	m	1	0	2	12	12	12			\$3 50 d
Carver	28	Scotland	Scotland	s			0	14	7	12			3 38 "
Cabinet-maker.	31	Denmark	Denmark	s			0	8	1	8	104	no work	3 80 "
"	15	Scotland	Scotland	s			0	3	7m	7	180		8 00 w
"	39	Holland	Holland	m	1	0	2	12	3	12			1 75 d
"	17	"	"	s			0	13	1	12			4 20 w
Filler	34	"	"	m	3	0	4	11m	1	4	208	no work	7 00 "
Rubber	32	"	"	m	3	2	4	10	9	8	91	"	1 75 d
Filler	19	"	"	s			0	3	7m	12			6 00 w
Polisher	19	"	"	s			0	1	1	11	28	no work	6 50 "
Rubber	32	Denmark	Denmark	m	2	0	3	8	1	12			1 60 d
Filler	26	Holland	Holland	m	1	0	2	1	2m	9	78	no work	7 00 w
Finisher	37	"	"	m	3	1	2	1	1w	9	78	"	7 00 "
Rubber	36	"	"	m	3	1	4	6	10	10	52	"	1 75 d
"	41	"	"	s			0	6	7m	7	180	"	1 75 "
Finisher	30	"	"	s			0	7	2	12			1 70 "
"	42	"	"	s			0	7	1	3	234	no work	1 00 "
"	11	Michigan	U. S.	s			1	2	1	6	156	sick	1 50 "
"	19	Canada	Canada	s			0	6	3w	7	180	no work	1 50 "
"	38	Holland	Holland	m	0	0	1	14	3	10	53	sick and no work	1 80 "
Filler	18	"	"	m	1	0	2	14	13	11	25	sickness	7 50 w
Finisher	31	"	"	s			0	1	2m	8	104	no work	1 40 d
"	42	"	"	m	6	5	0	2	1	8	156	"	1 40 "
Machine-hand.	14	"	"	s			0	2	1	6	104	sch'l and no wrk	3 12 w
Foreman	32	Michigan	U. S.	m	1	1	2	33	18	12			3 84 d
Cabinet-maker	28	Germany	Germany	m	1	0	2	14	2	11	26	no work	9 25 w
Finisher	30	Holland	Holland	m	5	0	6	1	1	11	13	"	6 50 "
Cabinet-maker	30	Norway	Norway	m	2	0	3	12	10	10	30	"	10 73 "
"	34	Michigan	Holland	s			0	8	1w	10	12	"	1 75 d
"	34	Holland	"	m	5	3	6	17	14	11	9	"	14 00 w
Finisher	12	Ohio	U. S.	m	2	2	3	9	9	11	6	"	1 85 d
Packer	41	Michigan	"	m	1	1	2	9	9	10	30	"	12 00 w
Cabinet-maker	43	Indiana	"	s			0	6	1	3	234	"	1 75 d
Machine-hand	30	Holland	Holland	m	2	0	5	4	1	12			1 20 "
"	27	Michigan	Germany	m	0	0	1	11	11	11	26	laid off	15 00 w
Packer	30	Ohio	"	m	1	0	2	8	8	11	26	no work	1 75 d
Laborer	16	Holland	Holland	s			0	2	5w	12			4 00 w
Upholsterer	45	France	France	m	2	0	3	29	10	12			100 00 m
Machine-hand	19	Michigan	U. S.	s			0	3	3	11	13	sick and no wrk	1 30 d
Cabinet-maker	51	Holland	Holland	m	5	1	4	14	14	11	26	no work	2 00 "
Laborer	56	"	"	m	4	2	5	7	7	11	13	"	1 45 "
Packer	27	New York	U. S.	s			0	5	8m	11	13	"	1 75 "
"	41	Michigan	"	s	3	3	4	3	10	30		"	1 45 "
Upholsterer	29	Austria	Austria	m	0	0	1	17	8m	10	30	"	2 50 "
Packer	30	Ohio	Holland	m	1	0	2	13	13	11	26	"	1 75 "
Upholsterer	21	Michigan	"	s			0	4	4	11	19	"	1 75 "
Machine-hand	31	"	"	m	2	2	3	11	7	10	53	"	2 50 "
"	16	Holland	"	s			0	1	1	6	156	"	3 50 w
"	29	New York	Ireland	m	1	0	2	6	4	11	13	row	2 50 d
Cabinet-maker	32	Michigan	Holland	m	3	1	5	13	10	10	52	sick and no wrk	1 75 "
Polisher	29	Holland	"	m	3	0	4	3	3	12			1 40 "
Water rubber	30	"	"	m	2	0	3	9	1w	12			1 75 "
Oil finisher	27	"	"	m	3	1	4	4	7	11	13	no work	1 75 "
"	45	New York	U. S.	m	0	0	1	4	2	11	26	"	1 75 "
Polisher	29	Holland	Holland	m	0	0	1	2	4m	12			1 00 "

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If married, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.	
\$1,082	0	\$1,128		0	\$3,500			no	piano	2	2	1		\$2,500				14
1,089				0	no			"	none	1	1	1	\$5 00	2,000		\$5 00	14	
685				0	"			"	"	1	0	1	\$ 75		1	5 00	12	
91				0				"	"								12	
548		548		0	1,000			"	"								12	
218				0	no			"	"				*				14	
121	0	180		0			\$8 50	"	"								10	
395	0	345		0	1,000	\$400		yes	"	1				1,350	1	5 00	14	
312	0			0	no			no	"				*				8	
309	0			0	"			"	"								12	
499	0	500		0	"		5 00	yes	"		1						9	
272	\$40			0	"			no	"				\$ 50				11	
272	0	273		0	"		6 00	yes	"								16	
455	0	430		0	800	400		"	"		1	1					14	
318	0			0	no			no	"				\$ 50	100	2	5 00	12	
480				0	"			"	"				*				18	
78	0			0	"			"	"				\$ 50				12	
284				0	"			"	"				\$ 50				16	
273	0			0	"			"	"				\$ 50				18	
468	0	468		0	"		\$ 00	yes	"	1					1	5 00	14	
397	0	357		0	530	400		no	"						1	5 00	10	
187	0			0	no			"	"				\$ 00				9	
318	70	218		0	900	800		yes	"		1	ew					9	
110				0	no			no	"				*				12	
1,196		1,000		\$5,000	5,000			yes	piano	1				3,600			12	
442	100	442		0	no		5 00	yes	none		2						14	
224	0	324		0	"		5 00	no	"								12	
458		438		0	1,200			"	"	1					1	5 00	16	
455			90	0	no			"	"						1	5 00	14	
667		625	42	0	2,570	650		yes	"		1				1	5 00	18	
565		450	0	0	no		\$ 00	"	organ	1	1				2	10 00	12	
545		545	0	0	1,500	350		"	none	1	1				2	5 00	15	
136			0	0	2,700	500		no	"				\$ 50		1	5 00	18	
374	0	374	0	0	700	500		yes	"						1	5 00	10	
715	0	695	30	0	no		4 00	no	"	1					1	5 00	18	
500		350	150	0	1,300	200		yes	"						1	5 00	16	
207			0	0	no			no	"				\$ 00				14	
1,200		900	300	0	"		10 50	yes	"	1	5	1			2	5 00	16	
358			*	0	"			no	"			1	*		2	5 00	16	
572	0	570	30	0	1,300	800		yes	"		1						14	
638	30	365	75	0	2,000	400		"	"						1	5 00	10	
522			300	400	no			no	"				4 50		1	5 00	17	
395		500	0	0	"		\$ 00	yes	piano						1	5 00	18	
622		550	75	200	"		\$ 00	no	none	1	1	2		500	1	5 00	18	
500		450	50	0	3,000			yes	"	1					1	5 00	17	
511			200	0	no			no	"				\$ 00				16	
620		400	100	refused	1,200			yes	"	1	1				1	5 00	12	
86			*	0	no			no	"				*				18	
747		747	0	0	"		6 00	yes	"	1					1	5 00	12	
455		455	0	0	1,000	800		"	"		1						17	
425	0	365	0	0	900	800		"	"		2						8	
545		400	80	0	no		\$ 00	"	"		1			96			12	
522	2	365	50	0	"		\$ 50	"	"		1						15	
500		400	150	2,200	"		10 00	"	"	1	1			2,000	1	5 00	18	
312	47	312	0		"		\$ 25	no	"		2	ew		75			14	

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	most employed during	Cause for loss of time.	Wages received.
Oil finisher.....	40	Holland..	Holland..	m	6	8		sick, no work	\$1 74 d
Machine hand....	18	Michigan..	U. S.....	m	3	3		no work	1 08 "
Varnisher.....	30	Holland..	Holland..	m	3	3			1 08 "
Hand-polisher....	29	"	"	m	1	1			1 84 "
Oil finisher.....	34	"	"	m	1	0		no work	1 75 "
Finisher.....	32	New York..	Germany..	s	0	0			9 00 w
Teamster.....	36	Michigan..	U. S.....	w	0	0			10 00 "
Machine hand....	24	Holland..	Holland..	m	0	0			1 85 d
Varnisher.....	30	"	"	m	3	1			1 80 "
Cabinet-maker....	34	Michigan..	England..	s	0	0		no work	10 00 w
Finisher.....	36	Holland..	Holland..	m	1	1		"	9 00 "
"	28	"	"	m	1	1		"	1 25 d
Filler.....	45	"	"	m	3	3		"	1 25 "
"	28	"	"	m	3	3		"	1 85 "
Finisher.....	19	Michigan..	U. S.....	s	0	0		vacation	9 00 w
Varnisher.....	17	Germany..	Germany..	s	0	0			4 50 "
"	26	Michigan..	England..	s	0	0		no work	1 65 d
Finisher.....	31	"	U. S.....	s	0	0		"	9 00 w
Machine hand....	19	Holland..	Holland..	s	0	0		"	1 25 d
Trimmer.....	35	Germany..	Germany..	s	0	0			1 75 "
Sand-paperer....	53	Holland..	Holland..	m	1	1			1 10 "
Carver.....	16	Michigan..	Germany..	s	0	0			8 00 w
"	35	Maine.....	Ireland..	m	2	0			9 30 d
"	41	England..	England..	m	5	3		no work	9 30 "
Machine hand....	22	Poland....	Poland....	m	1	0		"	8 50 w
Cabinet-maker....	43	Germany..	Germany..	m	0	0		"	2 50 d
Laborer.....	45	England..	England..	m	3	2		"	1 25 "
Carver.....	22	Austria..	Austria..	m	1	0			3 00 "
Finisher.....	34	Holland..	Holland..	s	0	0			1 75 "
Lugger.....	18	Michigan..	"	s	0	0		no work	2 50 w
"	14	Holland..	"	s	0	0		laid off	3 00 "
Laborer.....	16	"	"	s	0	0			3 50 "
Sand-paperer....	16	Michigan..	Canada..	s	0	0		sickness	2 70 "
Cabinet-maker....	23	U. S.....	U. S.....	m	1	1			1 00 d
Veneering.....	19	Holland..	Holland..	s	0	0		laid off	1 00 "
Machine hand....	19	Ireland..	Scotland..	s	0	0			6 00 w
Cabinet-maker....	23	Holland..	Holland..	s	0	0		no work	1 50 d
Machine hand....	17	Michigan..	U. S.....	s	0	0		first work	5 00 w
"	40	"	"	m	1	1		no work	10 00 "
Lugger.....	14	Holland..	Holland..	s	0	0		"	3 00 "
Bronzing.....	36	Ohio.....	U. S.....	m	3	3			2 50 d
Finisher.....	30	Michigan..	"	m	1	1		shut down	1 75 "
Turner.....	14	Holland..	Holland..	s	0	0			3 00 w
Carver.....	44	England..	England..	m	2	2			2 10 d
Cabinet-maker....	54	Germany..	Germany..	m	6	6		no work	1 75 "
Turner.....	16	Holland..	Holland..	s	0	0			5 00 w
Filler.....	30	"	"	m	3	3		no work	1 25 d
Cabinet-maker....	35	Scotland..	Scotland..	w	4	4			1 85 "
Machine hand....	37	Holland..	Holland..	m	4	4		laid off	1 75 "
"	24	Penn.....	U. S.....	s	0	0			2 00 "
Finisher.....	32	Poland....	Poland....	s	0	0	0 7 2w 11% 6	holidays	8 45 w
Filler.....	24	Holland..	Holland..	m	1	1	4 12 d 12 d 10 12 52		1 00 d
Lugger.....	19	"	"	s	0	0	0 7 12 12 12 12		5 00 w
Machine hand....	45	Indiana..	U. S.....	m	4	4	5 25 12 11% 12	no work	2 50 d
Finisher.....	27	Holland..	Holland..	m	1	1	2 7 12 12 12 12		1 00 "

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you?	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you?	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$500	\$200	\$450	\$50	0	\$1,000	---	---	yes	none	---	1	---	---	---	---	---	14
315	---	---	0	0	no	---	---	no	"	---	---	---	---	---	---	---	14
561	0	500	0	0	no	---	8 00	yes	"	1	4	1	*	---	---	10 00	16
577	---	325	100	0	1,000	\$500	---	---	"	---	1	1	---	---	---	5 00	15
500	---	400	100	0	1,200	850	---	---	organ	1	1	1	---	---	---	10 00	17
468	---	---	0	\$150	no	---	---	no	none	---	---	---	\$3 75	---	---	---	16
520	---	---	175	300	"	---	---	"	"	1	---	---	4 00	---	---	5 00	17
514	0	800	0	0	"	---	6 00	"	"	---	2	---	---	\$50	---	---	17
561	---	561	0	0	1,000	---	---	yes	"	---	---	---	---	---	---	---	14
476	---	---	50	50	no	---	---	no	"	---	1	---	4 00	1,500	---	5 00	15
438	0	400	50	0	750	350	---	yes	"	1	1	---	---	---	1	5 00	18
365	25	280	50	0	500	225	---	"	"	1	---	---	---	194	1	5 00	16
465	---	885	0	0	800	400	---	no	"	---	1	---	---	---	---	---	6
394	0	394	0	0	no	---	4 50	yes	"	---	1	---	---	---	---	---	10
409	---	---	90	8	"	---	---	no	"	---	---	---	8 75	---	1	5 00	13
58	---	---	*	0	"	---	---	"	"	---	1	---	*	96	---	---	13
493	---	---	0	0	"	---	---	"	"	---	---	---	8 50	---	1	5 00	16
438	---	---	100	100	"	---	---	"	"	---	---	---	8 75	---	---	---	12
365	---	---	0	0	"	---	---	"	"	---	---	---	*	---	1	5 00	12
455	0	---	0	0	"	---	---	"	"	---	---	---	4 00	---	---	---	14
578	0	830	0	0	"	---	6 00	yes	"	---	1	---	---	---	---	---	16
156	---	---	*	0	"	---	---	no	"	---	---	---	*	114	---	---	14
1,030	---	700	0	0	250	---	---	yes	piano	1	1	2	---	---	2	10 00	16
1,225	0	973	0	0	no	---	12 00	"	none	1	1	---	---	---	1	10 00	12
368	---	312	0	0	"	---	4 50	"	"	2	---	---	---	---	---	---	16
682	---	682	0	0	700	---	---	"	"	---	8	---	---	---	2	10 00	10
373	---	375	0	0	no	---	6 00	"	organ	---	---	---	---	7,250	1	5 00	14
858	---	500	0	0	"	---	6 50	"	none	---	2	---	*	2,000	---	---	15
546	0	---	*	0	"	---	---	no	"	---	---	---	*	---	---	---	14
120	---	---	*	0	"	---	---	"	"	---	---	---	*	---	---	---	14
150	---	---	*	0	"	---	---	"	"	---	---	---	*	---	---	---	12
181	---	---	*	0	"	---	---	"	"	---	---	---	*	---	---	---	11
126	---	---	*	0	"	---	---	"	"	---	---	---	*	---	---	---	13
499	---	457	0	0	"	---	5 00	"	"	1	---	---	---	---	1	5 00	15
273	---	---	*	0	"	---	---	"	"	1	---	---	*	---	1	5 00	14
86	---	---	*	0	"	---	---	"	"	---	---	---	*	---	---	---	13
429	---	---	0	0	"	---	---	"	"	1	---	---	4 00	---	1	5 00	14
65	---	---	*	0	"	---	---	"	"	---	---	---	*	---	---	---	14
676	---	557	0	0	8,000	500	---	yes	"	---	---	---	*	---	8	15 00	15
143	---	---	*	0	no	---	---	no	"	---	---	---	*	---	---	---	11
780	---	800	0	0	"	---	8 50	yes	"	1	---	---	---	---	1	5 00	13
585	---	535	0	0	"	---	6 00	"	"	1	2	---	---	---	---	---	10
156	---	---	*	0	"	---	---	no	"	---	---	---	*	---	---	---	12
1,029	0	1,029	0	0	1,200	---	---	yes	organ	2	8	---	---	2,050	2	10 00	8
455	---	825	0	0	700	200	---	"	none	---	1	---	---	---	---	---	14
290	---	---	*	0	no	---	---	no	"	---	---	---	*	---	---	---	12
373	0	375	0	0	no	---	4 00	"	"	---	---	---	---	---	---	---	8
576	---	577	0	0	3,000	---	---	yes	organ	1	---	---	---	2,000	1	5 00	17
500	---	455	0	0	700	350	---	"	none	1	---	---	---	---	1	5 00	17
572	---	---	0	0	no	---	---	no	"	1	---	---	4 50	---	1	5 00	14
420	---	---	0	0	"	---	---	"	"	---	1	---	4 50	---	---	---	13
290	0	260	0	0	"	---	3 00	"	"	---	---	---	---	---	---	---	14
259	0	---	0	0	"	---	---	"	"	---	---	---	---	---	---	---	12
747	---	750	0	0	1,000	500	---	yes	"	---	1	---	3 00	---	1	5 00	13
312	20	300	0	0	no	---	3 50	no	"	---	1	---	---	---	---	---	13

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many demand on you for plover.	No. of months employed during year.	Cause for loss of time.	Wages received.
Trimmer.....	36	Holland	Holland	m	3	3		10	no work	\$1 75 d
Packer.....	35	New York	U. S.	m	2	1		11	"	1 50 "
".....	21	Michigan	"	s	1	0		10	"	1 25 "
".....	23	"	"	m	1	0		10	slack business	1 65 "
Cabinet-maker..	30	"	Germany	m	1	0		10	"	2 25 "
".....	28	"	Holland	m	3	0		11	no work	2 10 "
".....	62	Sweden	Sweden	m	10	2		12	"	1 85 "
Sand-paprerer..	16	Holland	Holland	s	0	0		11	no work	4 00 w
Stainer.....	23	"	"	m	0	0		11½	"	1 45 d
Machine hand..	24	Indiana	U. S.	s				10	"	1 75 "
Finisher.....	44	Holland	Holland	m	7	2		12	"	2 00 "
Cabinet-maker..	46	Austria	Austria	m	3	1		9	no work	9 00 w
".....	44	Germany	Germany	m	4	3		11½	"	1 40 d
".....	20	Michigan	"	s				9	no work	1 10 "
".....	24	Poland	Poland	m	1	0		10½	"	2 00 "
Finisher.....	30	Holland	Holland	m	1	0		12	"	1 40 "
Turner.....	37	Germany	Germany	m	0	0		11½	no work	2 50 "
Polisher.....	37	Holland	Holland	m	2	0		11	"	1 45 "
Carver.....	19	"	"	s				13	"	2 50 "
Cabinet-maker..	37	England	Ireland	w'r	2	0		11	dull trade	1 00 "
".....	56	New York	U. S.	m	1	0		10½	no work	2 10 "
Finisher.....	23	Holland	Holland	m	2	0		10	"	9 00 w
Sand-paprerer..	14	"	"	s				12	"	3 50 "
Cabinet-maker..	24	Poland	Poland	s				10	no work	1 80 d
Finisher.....	21	Holland	Holland	s				12	"	1 00 "
Cabinet-maker..	26	Michigan	U. S.	m	1	0		12	"	2 65 "
".....	19	Germany	Germany	s				9	no work	1 00 "
".....	16	Michigan	"	s				11½	"	3 50 w
".....	23	"	Holland	m	2	0		10	"	1 70 d
Finisher.....	24	Holland	"	m	0	0		10	"	1 75 "
Cabinet-maker..	30	Austria	Austria	m	3	2		12	"	2 25 "
Carver.....	19	Michigan	Germany	s				11½	"	1 50 "
".....	23	England	England	s				12	"	2 50 "
Finisher.....	32	Holland	Holland	m	2	1		10	"	1 00 "
Sand-paprerer..	26	"	"	s				11	no work	1 00 "
".....	50	"	"	m	3	0		11½	"	1 04 "
Finisher.....	31	"	"	m	3	1		11½	"	1 40 "
".....	28	"	"	m	3	1		11	"	9 00 w
Machine hand..	51	Canada	Canada	m	11	1		12	"	2 00 d
Cabinet-maker..	20	Michigan	U. S.	m	1	0		11	"	18 50 w
Machine hand..	18	Holland	Holland	s				w 1/2	first work	2 50 "
Wood turner...	21	Canada	Canada	s				11	no work	2 25 d
Cabinet-maker..	29	Germany	Germany	m	1	0		12	"	1 80 "
Finisher.....	32	Michigan	Holland	m	1	0		9	no work	1 25 "
Cabinet-maker..	16	Penn.	U. S.	s				w 9	"	4 00 w
Finisher.....	24	Holland	Holland	m	3	0		w 10	"	1 70 d
Cabinet-maker..	18	"	"	s				10	"	1 25 "
Machine hand..	59	Ohio	U. S.	s				12	"	2 75 "
Stock clerk....	44	England	England	m	2	0		12	"	14 00 w
Cabinet-maker..	39	Poland	Poland	m	3	2		13	"	9 00 "
".....	37	Austria	Austria	s				11	no work	1 75 d
Filler.....	20	Holland	Holland	s				10½	"	1 00 "
Machine hand..	20	Penn.	U. S.	m	1	1		9	"	2 10 "
Cabinet-maker..	40	Holland	Holland	m	2	1		11	"	2 35 "
".....	38	Germany	Germany	m	1	1		10	"	2 50 "

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.	
\$455		\$450	0	0	no		\$3 00	yes	none	1 1					16	
429		429	0	0	\$1,000	\$500		no	no	1					14	
325			0	0	no			no	no			\$3 50	1	\$5 00	15	
450		800	\$32	0	2,000	500	7 00	yes	no	1					14	
885		638	0	0											14	
800		365	0	0	no		5 00	no	no	1		\$2,000	1	5 00	15	
952		400	0	0	"		8 00	no	piano	1 3			1	5 00	17	
190	0		*	0	no			no	none			*			13	
424	0	423	0	0	500	800		yes	no	1					14	
455	0		0	0	no			no	no	1		8 50			13	
624	0	624	0	0	800			yes	no	1					10	
551	0	312	0	0	1,000	600		no	no	2		800	1	5 00	15	
478	0	428	0	0	no		7 00	no	no	1					15	
257			*	0	no			no	no			*			17	
546		864	0	0	"		8 00	no	no	1			1	5 00	17	
437	0	365	0	0	"		4 00	yes	no	1 1		90			9	
732		500	0	0	1,500			no	no	1 1	1	2,000	1	5 00	15	
414	0	414	0	0	750	300		no	no						15	
780			0	0	no			no	no			5 00	2	10 00	18	
286	\$2	286	0	0	no		3 50	no	no	3					9	
877		300	0	0	1,200	700		yes	organ				1	5 00	14	
380		390	0	0	1,300	650		no	none	1 1					10	
180			*	0	no			no	no			*			13	
416	0		U	0	no			no	no			5 00	1	3 00	15	
312	25		0	0	"			no	no			8 00			13	
827		400	200	\$30	1,000	500		yes	organ			1	1	5 00	16	
294			*	0	no			no	none			*			14	
178			100	0	no			no	no						12	
442		364	0	0	900	750		yes	no				1	5 00	14	
455	0	365	0	0	no		5 50	no	no				1	5 00	14	
702	0	702	0	0	3,000			no	no	1 4	1	500	1	5 00	13	
439			0	0	no			no	no	1		4 00			14	
780			0	0	no			no	no				1	5 00	16	
260	0	300	0	0	"		5 00	yes	no						14	
286	0		0	0	"			no	no			8 00			13	
311	0	300	0	0	"		5 00	yes	no						14	
409	0	409	0	0	"		6 00	no	no				100	1	5 00	13
429	0	429	0	0	500			no	no						8	
624	0	520	0	0	no		9 00	no	organ	1		1,250	1	5 00	11	
643	0	643	0	0	1,000			no	none	1		2,000	1	5 00	14	
5			*	0	no			no	no			*			13	
643			0	0	"			no	no	1		4 00	1	5 00	12	
500		300	0	0	500	250		no	no						15	
292	0	292	0	0	no		8 00	yes	organ			*			15	
156			*	0	no			yes	none						14	
442	0	442	0	0	850	650		no	no						12	
325			*	0	no			no	no			*			13	
858			0	0	no			no	no			4 50	1	5 00	14	
1,351	75	700	50	150	no		10 00	yes	organ	1 5	2	3,000	3	10 00	16	
468	0	418	0	0	"		8 00	no	none	1					16	
500			0	0	"			no	no	1		4 50	1	5 00	15	
273	0		0	0	"			no	no						12	
907		458	0	0	2,000			yes	no	1		1 3 00			14	
672	0	672	0	0	1,8 0			no	no				1	5 00	13	
650		650	0	0	500	50		no	no	1 1		2,500	3	15 00	14	

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Upholsterer.....	38	Germany	Germany	m	0	0	1	28	18	11½	19	no work	\$3 25 d
Finisher.....	38	Holland	Holland	m	0	0	3	8	1 d	10	58	"	1 25 "
Cabinet-maker.....	16	Michigan	"	s	3	1	0	2½	2½	18			4 00 w
Steiner.....	35	Holland	"	m	3	1	4	½	½	10	58	no work	7 50 "
Sand-paperer.....	58	"	"	m	2	0	1	7	8	12			1 00 d
Finisher.....	21	New York	U. S.	m	0	0	1	4	1	10	52	no work	1 50 "
Trimmer.....	44	Holland	Holland	m	8	1	4	7	7	10	52	"	1 85 "
".....	31	"	"	m	8	1	4	12	1	11	25	"	2 00 "
Glass setter.....	30	England	England	m	6	5	7	7	8	12			12 75 w
Stock-keeper.....	32	Michigan	U. S.	s			0	8	3	12			1 85 d
".....	50	Ireland	Ireland	m	2	1	3	14	14	11½	19	no work	1 50 "
Cabinet-maker.....	32	New York	Germany	m	1	0	2	17	8	11½	19	"	2 62 "
Turner.....	20	Holland	Holland	s			0	2	6	11	20	"	1 50 "
Cabinet-maker.....	29	Michigan	U. S.	w'r	0	0	0	3	3	12			12 00 w
Laborer.....	28	Holland	Holland	s			0	1m	1m	1	200		88 d
".....	13	"	"	s			0	1	1	11½	12	no w'k & sickness	2 61 w
Cabinet-maker.....	21	New York	Germany	s			0	1½	1½	12			1 30 d
Stock-keeper.....	32	"	Scotland	w'r	0	0	0	8	2	12			15 00 w
Machine hand.....	15	Michigan	Holland	s			0	½	1	11½	19	no work	4 50 "
Cabinet-maker.....	16	"	"	s			0	1	1	11½	19	"	8 10 "
".....	18	"	Scotland	s			0	3	3½	11½	19	"	1 00 d
".....	23	"	Germany	m	0	0	1	6	2½	12			2 75 "
Machine hand.....	25	Iowa	U. S.	m	1	0	2	12	8	11½	19	no work	1 75 "
Teamster.....	21	Michigan	Holland	s			0			12			10 00 w
Machine hand.....	44	Maryland	Germany	m	1	1	2	12	12	11½	12	no work	1 82 d
Carver.....	50	France	France	w'r	2	0	2	30	4	11	26	"	2 30 "
Cabinet-maker.....	17	Holland	Holland	s			0	½	2m	6		first work	4 00 w
".....	23	Austria	Austria	s			0	8	8w	12		"	1 75 d
".....	43	Sweden	Sweden	s			0	17	15	10½	20	no work	10 00 w
Veneer cutter.....	17	Michigan	U. S.	s			0	2½	2½	11	26	vacation	5 50 "
Machine hand.....	15	Holland	Holland	s			0	½	1	11½	18	no work	3 00 "
Cabinet-maker.....	23	Michigan	Austria	s			0	12	10	10½	20	"	2 35 d
Carver.....	21	"	Ireland	s			0	7	4	11	26	"	8 00 "
".....	35	Germany	Germany	m	3	1	5	20	8	11½	19	"	8 30 "
Cabinet-maker.....	16	Holland	Holland	s			0	2	2w	12			8 00 w
Polisher.....	51	"	"	m	2	0	2	10	12	11½	18	no work	1 80 d
Cabinet-maker.....	43	Germany	Germany	m	4	4	5	38	12	10	52	"	2 50 "
Polisher.....	19	Holland	Holland	s			0	1	2m	11	26	"	1 00 "
Cabinet-maker.....	24	Germany	Germany	s			0	8	8	11	25	"	1 75 "
Sand-paperer.....	55	U. S.	U. S.	m	4	1	5	12	12	11½	18	"	1 12 "
Trimmer.....	51	Holland	Holland	m	4	0	5	10	10	8	104	sickness	1 85 "
".....	22	"	"	s			0	½	½	11			10 00 w
Rubber.....	38	"	"	m	6	2	7	7½	7½	11			1 85 d
Round-worker.....	14	U. S.	"	s			0	2	2	11			3 00 w
Varnisher.....	52	Holland	"	w'r	1	0	0	5	2	1		no work	1 50 d
Cabinet-maker.....	33	Germany	Germany	m	3	0	4	30	2	1		"	1 50 "
Polisher.....	32	Holland	Holland	m	0	0	1	1w	1w	1		"	1 00 "
Turner.....	44	Germany	Germany	s			0	29	2	11		"	2 25 "
Machine hand.....	18	"	Poland	s			0	4	1½	1		"	1 00 "
Trimmer.....	29	"	Germany	m	1	0	2	25	8	1		"	1 75 "
Upholsterer.....	18	U. S.	"	s			0	1	1	11			4 50 w
Rubber.....	25	Holland	Holland	m	0	0	1	8m	8m	1		first work in U. S.	1 10 d
Cabinet-maker.....	19	Germany	"	s			0	3	3	11			1 00 "
".....	15	U. S.	Germany	s			0	½	½	11			3 50 w
Tende machine.....	14	"	Canada	s			0	1m	1m	1		first work	2 65 "

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$658		\$659	0	0	\$2,000			yes	none								14
325	0	300	0	0	no		\$5 00	no	"		2					1	\$5 60
308			*	0				no	"								18
325	0	325	0	0	800			"	"		2						14
312	0	312	0	0	800	\$800		"	"								14
390		390	0	0	no			"	"				\$5 00				16
481	0	487	0	0	1,200	150		yes	"		1						14
572		472	\$100	0	1,500	750		"	"		4						18
715		715	0	0	800	200		"	"		1			\$2,000		1	5 00
515			100	\$200	no			no	"		1		4 00		1	5 00	20
438	0	438	0	0	4,000	no		yes	organ		1	1	2				14
766		500	0	0	no		8 50	no	none		1	1				2	10 00
429			*	0	"			no	"				*				13
424			0	0	"			"	"			1	4 50			1	5 00
22	\$20		0	0	"			"	"				3 00				12
130			*	0	"			"	"				*				12
405			0	0	"			"	"				4 00				18
780			0	0	"			"	"				4 00			1	5 00
219			*	0	"			"	"				*			1	5 00
151			*	28	"			"	"				*	500			14
292			*	0	"			"	"				*				14
858		500	0	0	"		5 00	"	"								15
571		210	185	0	1,000	800		yes	organ		1	1				1	5 00
520			0	0	no			no	"				8 25				12
588		400	0	0	3,000			yes	organ		1					1	5 00
944	0		100	1,000	no			no	none				5 00	2,000		1	5 00
104	0		0	0	"			"	"		1	1					13
546	0		100	350	"			"	"		1	1					14
454	75		0	0	"			"	"		1	1	1	4 00		2	10 00
202			0	0	"			"	"				3 00				12
150			*	0	"			"	"				*				18
641			100	0	"			"	"			1	4 00			1	5 00
858			150	0	"			"	"				4 00				14
595		400	200	0	2,500	600		yes	"		1	1	1	2,000		2	5 00
156			*	0	no			no	"				*				15
478	0	375	100	0	1,000	700		"	"			1				1	5 00
480	0	500	0	0	2,000			yes	"			1		2,000		1	5 00
286	0		0	0	no			"	"				*				19
500	0		150	200	"			"	"			1	3 50			1	5 00
434		600	50	100	"		7 00	yes	"			1					21
435	0	500	100	0	650	180		"	"			1				1	5 00
530	25		0	0	no			"	"				4 50				14
727	0	700	25	0	700	800		yes	"				*			1	5 00
156			*	0	no			"	"				*				12
443	0		100	200	"			"	"				3 25				17
438	0	400	0	0	"		4 00	yes	"								18
221	0	200	0	0	"		3 00	no	"								12
585	0		20	0	"			"	"				4 00				7
282			*	0	"			"	"				*				14
522	10	450	50	0	800	400		yes	"			1				1	5 00
274			0	0	no			"	"		1	2		3 00			15
220	0	200	0	0	"		3 00	no	accord'n				*				12
312			*	0	"			"	"				*				14
182			*	0	"			"	"				*				14
11			*	0	"			"	"				*				14

* Gives wages to parents and lives at home.

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Machine hand.	38	Belgium	Belgium	m	0	0	1	14	12	12	65		\$2 25 d
Cabinet-maker.	38	U. S.	U. S.	m	1	0	1	14	10	9½	52	sickness	14 75 w
Upholsterer.	35	Germany	Germany	s	2	1	2	5	6½	10	52	no work	2 25 d
Car loader.	35	Holland	Holland	m	2	1	2	1	1	12			1 25 "
Trimmer.	42	"	"	m	7	5	9	12	12	11½	13	no work	1 75 "
Rubber.	28	"	"	m	0	0	1	½	½	6		first wrk in U. S.	1 10 "
Packer.	23	U. S.	Germany	s	1	0	1	8	4	11½	8	no work	1 75 "
Cabinet-maker.	40	Germany	"	m	2	1	4	23	14	11½	18	"	2 62 "
"	23	U. S.	"	s	1	0	0	8	8	11½	19	"	2 10 "
Polisher.	21	Holland	Holland	s	1	0	0			10	52	"	1 00 "
Car loader.	28	U. S.	"	m	1	0	2	7	7	12			1 40 "
Cabinet-maker.	38	Germany	Germany	m	2	1	3	25	3	10	52	no work	1 75 "
Polisher.	31	Holland	Holland	m	4	2	5	5	5	12			7 50 w
Rubber.	32	"	"	m	1	0	2	8	5	11	28	no work	1 30 d
Polisher.	27	"	"	m	0	0	1	½	½	9		first wrk in U. S.	1 10 "
Stainer.	55	"	"	m	4	1	5	5	5	12			1 45 "
Sand-paperer.	50	"	"	m	1	0	2	6	1	12			1 25 "
Polisher.	22	"	"	s	1	0	0	1	1	12			1 10 "
Filler.	28	"	"	m	3	1	4	½	½	12			1 25 "
Polisher.	21	"	"	s	1	0	0	½	½	9		first wrk in U. S.	1 10 "
Sand-paperer.	25	"	"	s	1	0	0	8w	8w	11	28	no work	1 00 "
"	52	"	"	m	3	0	4	2½	2½	12			1 00 "
Filler.	40	"	"	m	2	0	3	10m	½	10		first wrk in U. S.	1 00 "
Rubber.	30	"	"	m	3	0	4	2	2	12			1 75 "
Filler.	28	"	"	s	1	0	0	½	1m	10	52	no work	1 00 "
Varnisher.	28	"	"	s	2	0	0	10	5		26	"	1 25 "
Sand-paperer.	71	"	"	m	2	0	3	2	2				1 00 "
"	55	"	"	m	5	0	6	8	4				1 25 "
Finisher.	44	"	"	m	4	1	3	7d	7		52	no work	1 00 "
Filler.	45	"	"	m	3	0	4	6	6	½	19	"	7 50 w
Sand-paperer.	36	"	"	s	4	1	0	10m	10				1 00 d
Rubber.	33	"	"	m	4	1	5	6	2	½	38	no work	1 75 "
Sand-paperer.	53	"	"	m	2	0	3	½	½				1 00 "
Varnisher.	30	U. S.	Germany	s	1	0	0	3	1		26	no work	1 55 "
Rubber.	38	Holland	Holland	m	2	0	3	7	1		78	"	1 70 "
Finisher.	19	"	"	s	0	0	0	7	5		26	"	1 55 "
"	44	"	"	m	0	0	1	5	5		52	"	1 30 "
Sand-paperer.	18	"	"	s	0	0	0	6w	6			first wrk in U. S.	1 50 "
Filler.	22	"	"	s	1	0	0	½	1			"	1 00 "
"	27	"	"	s	1	0	0	6m				"	1 00 "
Cabinet-maker.	18	Scotland	Scotland	s	1	0	0	1	1				3 00 w
Lumber piler.	47	Holland	Holland	m	1	0	2	5	5				1 25 d
Cabinet-maker.	54	Austria	Austria	m	11	4	2	47	14	½	13	no work	2 50 "
Carving-maker.	16	Holland	Holland	s	1	1	0	4	14	½	18	no work	3 90 w
Cabinet-maker.	34	U. S.	Germany	m	1	1	2	18	14	½	18	no work	3 50 d
Round worker.	17	Holland	Holland	s	2	2	0	8	3	½	18	"	1 00 "
Cabinet-maker.	26	Germany	Poland	m	2	0	2	25	2	½	52	"	1 00 "
"	22	Holland	Holland	m	1	0	2	7	3	½	30	"	1 00 "
"	26	Canada	Scotland	m	3	0	4	8	8		26	"	1 00 "
"	24	U. S.	Germany	s	1	0	0	11	9				2 10 "
"	18	"	"	s	1	0	0	2	1	11	26	no work	4 50 w
"	16	"	"	s	1	0	0	1	1	12			3 50 "
Machine hand.	17	Holland	Holland	s	1	0	0	8	3	12			5 00 "
Cabinet-maker.	36	Germany	Poland	m	3	0	2	2	2	10½	30	no work	1 50 d
Chair-maker.	28	U. S.	Canada	s	1	0	0	8	8	11½	13	"	1 35 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$733	\$800	\$350	0	0	\$2,400	\$1,200	-----	yes	none	1	1	\$2,000	1	\$5 00	17
607	-----	475	0	0	1,000	-----	-----	no	-----	1	3	2,000	1	5 00	14
586	-----	-----	\$125	300	no	-----	-----	yes	-----	1	-----	\$5 00	-----	-----	14
421	0	350	50	0	375	200	-----	yes	-----	-----	-----	-----	-----	-----	14
773	0	700	50	0	500	200	-----	no	organ	-----	1	-----	-----	-----	13
172	50	200	0	0	no	-----	\$1 50	-----	none	-----	-----	-----	-----	-----	12
584	-----	-----	0	0	-----	-----	-----	-----	-----	1	4	5 00	-----	-----	14
733	0	500	200	0	1,000	-----	-----	yes	-----	1	1	2,500	1	5 00	15
614	-----	-----	50	0	no	-----	-----	yes	-----	1	-----	4 50	-----	-----	14
230	0	-----	0	0	no	-----	-----	-----	-----	-----	3 00	-----	-----	-----	14
437	-----	400	0	0	-----	-----	8 00	yes	-----	-----	-----	-----	-----	-----	16
455	0	400	0	0	-----	-----	7 00	-----	-----	-----	1	-----	-----	-----	14
490	0	490	0	0	-----	-----	5 50	-----	-----	-----	-----	-----	-----	5 00	10
372	0	250	100	0	700	-----	-----	no	-----	-----	-----	-----	-----	-----	12
237	0	200	0	0	no	-----	4 00	-----	-----	-----	-----	-----	-----	-----	13
608	50	500	50	0	500	100	-----	-----	-----	-----	-----	-----	1	5 00	14
390	0	350	0	0	no	-----	6 50	-----	-----	-----	1	-----	1	5 00	14
343	0	-----	*	0	no	-----	-----	-----	-----	-----	-----	-----	-----	-----	14
390	0	300	50	0	-----	-----	5 50	no	-----	-----	-----	-----	-----	-----	12
237	0	-----	0	0	-----	-----	-----	-----	-----	-----	3 00	-----	-----	-----	14
236	10	-----	0	0	-----	-----	-----	no	-----	-----	3 75	-----	1	3 00	13
312	0	300	0	0	-----	-----	3 50	-----	-----	-----	-----	-----	-----	-----	14
230	0	225	0	0	-----	-----	3 00	-----	-----	-----	-----	-----	-----	-----	13
548	40	400	125	0	-----	-----	5 50	yes	-----	-----	-----	-----	1	5 00	14
230	0	-----	0	0	-----	-----	-----	no	-----	-----	8 00	-----	-----	-----	14
337	-----	-----	50	175	-----	-----	-----	-----	organ	-----	3 00	-----	-----	-----	13
512	0	-----	0	0	-----	-----	-----	-----	none	-----	10 00	-----	-----	-----	13
540	0	500	50	0	800	500	-----	-----	-----	-----	1	-----	1	5 00	14
230	0	250	0	0	no	-----	5 00	yes	-----	-----	-----	-----	-----	-----	10
366	0	300	50	0	300	250	-----	yes	-----	-----	1	-----	1	5 00	12
312	0	-----	0	0	no	-----	-----	no	-----	-----	3 00	-----	-----	-----	12
773	125	600	100	0	900	375	-----	yes	-----	-----	1	-----	-----	-----	8
412	50	400	0	0	no	-----	10 00	-----	-----	-----	1	-----	1	5 00	15
443	-----	-----	50	100	-----	-----	-----	no	-----	-----	5 00	-----	-----	-----	12
598	75	500	100	0	900	300	-----	yes	-----	-----	1	-----	1	5 00	12
443	-----	100	100	120	no	-----	-----	no	accord'n	1	3 00	-----	1	5 00	12
336	0	200	75	0	300	150	-----	-----	none	-----	-----	-----	1	5 00	13
73	0	-----	*	0	no	-----	-----	-----	-----	-----	3 00	-----	-----	-----	18
182	0	-----	0	0	-----	-----	-----	-----	-----	-----	3 00	-----	-----	-----	8
182	0	-----	0	0	-----	-----	-----	-----	-----	-----	3 00	-----	-----	-----	13
156	0	-----	*	0	-----	-----	-----	-----	accord'n	-----	*	-----	-----	-----	14
471	0	421	0	0	500	100	-----	-----	none	1	-----	-----	-----	-----	10
747	0	600	0	250	1,000	-----	-----	yes	-----	3	-----	3,000	2	5 00	12
150	-----	-----	*	0	no	-----	-----	no	-----	-----	-----	-----	-----	-----	12
747	-----	500	150	0	3,000	1,800	-----	-----	-----	4	-----	-----	-----	-----	16
299	-----	-----	*	0	no	-----	-----	-----	-----	-----	-----	-----	-----	-----	14
416	0	300	50	0	900	300	-----	yes	-----	1	1	-----	-----	-----	11
437	-----	250	25	0	no	-----	5 50	-----	organ	1	1	-----	1	5 00	11
437	-----	457	0	0	-----	-----	8 00	-----	none	-----	-----	250	1	5 00	18
655	-----	100	0	0	-----	-----	-----	no	-----	-----	4 00	-----	-----	-----	13
214	-----	-----	*	0	-----	-----	-----	-----	2drums	-----	*	-----	-----	-----	16
181	-----	-----	*	0	-----	-----	-----	-----	none	-----	*	-----	-----	-----	14
230	-----	-----	-----	0	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	14
409	0	400	50	0	-----	-----	4 00	-----	-----	1	-----	-----	1	3 00	15
408	-----	25	300	0	-----	-----	-----	-----	-----	2	1	3 50	3	15 00	20

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Cabinet-maker	30	Germany	Germany	m	0	0	1	14	14	11	26	no work	\$2 65 d
Lumber piler	37	Holland	Germany	m	1	0	1	1	15	12			1 50 "
Carver	31	England	Holland	s			0	5	6	12			1 35 "
Cabinet-maker	29	Holland	England	m	0	0	0	5	5	11	19	no work	2 50 "
			Holland	m	0	0	1	6	6	10	52	"	1 75 "
Sand-paperer	16	"	"	s			0	3	4	11	19	"	2 75 w
Carver	18	U. S.	England	s			0	5	2	11	13	"	8 00 "
"	27	England	"	m	0	0	1	11	11	12			8 80 d
"	34	Germany	Germany	m	2	2	3	10	2	13			3 80 "
Cabinet-maker	26	Holland	Holland	s			0	13	8m	8		not in U. S.	1 85 "
"	18	U. S.	"	s			0	1	1	13			4 50 w
Stockman	22	"	U. S.	s			0	8	8	11	19	no work	1 50 d
Machine-hand	30	"	"	s			0	18	6w	12			2 25 "
Chair-maker	21	"	Germany	s			0	7	6	11	26	no work	2 10 "
Cabinet-maker	23	"	"	s			0	7	7	10	45	acc'dn't & no wk	1 50 "
Carver	43	England	England	m	3	1	4	20	2	12			3 00 "
Cabinet-maker	31	Poland	Poland	s			0	2	1	10	39	no work	1 75 "
"	41	Germany	Germany	m	3	1	4	24	8	11	26	"	2 50 "
Laborer	15	Michigan	Holland	s			0	2	2	13			3 50 w
Cabinet-maker	17	Holland	"	s			0	6m	2	13			4 00 "
Machine-hand	24	Canada	Scotland	s			0	4	7	11	26	no work	1 75 d
Photographer	34	Michigan	U. S.	m	0	0	1	14	4	12			4 85 "
Veneer-cutter	30	Holland	Holland	m	4	3	6	6	15	12			10 00 w
Machine-hand	28	Michigan	U. S.	m	4	2	6	6	6	11	26	no work	1 75 d
Carver	39	Kentucky	Germany	m	0	0	1	18	9	10	39	"	3 80 "
Cabinet-maker	18	Poland	Poland	s			0	4m	6			first wrk in U. S.	3 50 w
"	24	Germany	Germany	s				3	10	10	39	no work	1 60 d
Carver	18	England	England	s				3	12				5 00 w
Plumber	63	New York	U. S.	m	3	1		15	12				3 80 d
Laborer	27	Michigan	"	m	3	0		1	12				3 50 w
Cabinet-maker	35	Poland	Poland	m	0	0		3	10		52	sickn'rs & no wk	1 50 d
Turner	16	Holland	Holland	s				3	13				4 00 w
Cabinet-maker	28	Germany	Germany	m	3	0		8m	10		52	no work	1 60 d
Elevator-man	20	Poland	Poland	s				6	11	13		shut down	1 45 "
Laborer	18	New York	England	s				w	6w	1			5 00 w
Finisher	30	Michigan	U. S.	m	3	3		1	11	13	13	no work	3 12 "
Cabinet-maker	22	"	Germany	s				7	11	13	19	"	1 75 d
Chair-maker	30	"	U. S.	s				3	11	13	19	sickness	1 80 "
Cabinet-maker	16	"	England	s				1	12				3 00 w
Laborer	14	"	"	s				1	11		26	no work	2 50 "
Mill-wright	47	Canada	U. S.	m	3	0		11	12				3 40 d
NELSON, MATTER & CO.													
Saw-tender	15	Michigan	U. S.	s				m	5m	4		first work	3 50 w
Machine-hand	42	N. Jersey	Scotland	m	6	3		2	11	13	19	repairing	10 00 "
"	31	Michigan	Germany	m	0	0		4	10	10	39	"	3 00 d
"	15	Canada	Scotland	s				m	9m	11	13	"	3 50 w
"	46	"	U. S.	m	3	1		1	11	13	6	"	1 50 d
Saw-tender	15	Holland	Holland	s				3	11	13	13	no work	3 50 w
Machine-hand	18	Indiana	Germany	s				5	11	13	19	"	3 50 "
"	15	Holland	Holland	s				m	2m	1		first wrk	3 50 "
Laborer	40	"	"	m	5	1		4	11	13	19	no work	1 25 d
"	54	"	"	m	7	2		30	11	13	19	"	10 00 w

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.		Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
		Amount saved during the year.								Daily papers.	Weekly papers.	Magazines.					
\$758		\$600	\$100	0	\$1,900	\$800		no	none	1	1			\$2,000	1	\$5 00	13
468	0	468	0	0	1,300	500			"						1	5 00	14
421	0	360	50 00	0	450	200			"		1					5 00	10
731			0	0	no				"				\$4 00		1	5 00	17
455	0	455	0	0	no		\$8 00		organ						1	5 00	11
137			*	0					none				*				12
149				0					"								11
1,029		800	200 00	\$500			15 00	yes	piano	1	2	1			2	10 00	15
1,089	0	800	0	0			8 00	no	none	1	1					10 00	14
281	\$20		0	0					"	1			8 25				12
234			*	0					"				*				14
428			0	0					"				5 00		1	5 00	14
702		50 00	0	150					"				3 50				12
800			0	0					"			1	4 00		1	5 00	14
399			0	100					cornet				8 50				14
1,086		1,000	100 00	0	1,800			yes	piano	1	1	1		2,000	2	10 00	18
478	0		0	0				no	none				8 50		1	7 00	14
715	0	400	0	0	1,000			yes	piano	1	2	1	*		1	5 00	18
182		*	0	80	no			no	none				*		1	5 00	13
207			0	0					"								12
500			0	0					"				5 00		1	5 00	14
1,326		800	420 00	0			15 00		piano	1				5,000	2	10 00	20
519	10	519	0	0			5 20	yes	none								12
800		240	50 00	0	1,000	400			"	1		1			1	5 00	14
900		900	0	0	2,500				"	1					1	5 00	15
91			0	0	no			no	"				2 50				17
487		50 00	0	10					"	1	1		8 50		1	5 00	13
259		*	0	0					"		1		*	300	1	5 00	14
780		500	0	450	2,000			yes	guitar	1	1				1	5 00	20
442		400	15 00	0	2,500			no	organ		2	1		500	2	10 00	18
390	0	800	0	0	500			yes	none		8		*		2	10 00	19
207		*	0	0	no			no	"								14
416	0	250	50 00	0			4 00		horn						1	5 00	12
438		50 00	0	270					"		1		†		2	9 00	12
32			0	0					none				3 00				15
405		405	0	0			7 50	yes	"		1	1			1	5 00	15
511		50 00	0	50				no	"	1			3 50		2	10 00	14
478		30 00	0	0					"	1	2		4 00		1	5 00	15
156		*	0	25					"				*				13
119		*	0	0					"								18
1,136	200	600	350 00	0	1,200			yes	organ						1	5 00	11
68		*	0	0	no			no	none				*				15
487		250	0	0			6 00	yes	organ		2			1,000	1	5 00	8
546		446	100 00	0	2,200				none	1	1						21
174		*	0	0	no			no	"				*				14
640	50	459	0	0			10 00	yes	"	1							15
174		*	0	0				no	"				*				13
170		*	0	0					"				*				18
28		*	0	0					"				*				14
465	0	400	0	0	800	350		yes	"								14
807	0	800	0	0	1,000				"		1						20

* Gives wages to parents and lives at home.

† Lives with parents.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	Cause for loss of time.	Wages received.
Machine hand...	25	Holland...	Holland...	m	0	0	1	.....	\$9 10 w
Fireman.....	31	Michigan...	U. S.	m	0	0	1	.....	1 50 d
Finisher.....	42	".....	Ireland...	m	1	1	0	.....	1 25 "d
Carver.....	25	Holland...	Holland...	m	1	0	0	no work	15 00 w
".....	29	Scotland...	Scotland...	m	1	0	0	"	13 00 "
Cabinet-maker...	50	Canada...	".....	m	2	0	2	.....	2 25 d
".....	50	Ohio.....	U. S.	m	1	0	2	repairing	3 25 "
Carver.....	31	New York...	Germany...	m	3	1	4	sickness	3 50 "
Machine hand...	30	Indiana...	France....	m	0	0	1	repairing	2 23 "
Carver.....	27	Michigan...	U. S.	m	1	0	2	no work	15 00 w
Engineer.....	43	Canada...	England...	s	...	...	0	.....	100 00 m
Carver.....	21	".....	Scotland...	s	...	...	0	no work	15 00 w
Upholsterer...	28	Germany...	Germany...	s	...	...	0	"	12 00 "
".....	25	New York...	England...	m	2	2	2	fire in factory	1 75 d
Finisher.....	33	Holland...	Holland...	m	5	3	4	sickness	1 70 "
".....	35	".....	".....	s	...	...	1	"	6 00 w
".....	19	N. J.	U. S.	s	...	...	1	no work	1 00 d
".....	19	Michigan...	".....	s	...	...	0	"	7 50 w
".....	23	Sweden...	Sweden...	s	...	...	0	"	6 00 "
Cabinet-maker...	31	Holland...	Holland...	m	1	0	2	.....	1 75 d
Drapery sewing	37	Michigan...	U. S.	m	2	2	3	no work	6 00 w
Varnisher.....	30	Holland...	Holland...	w'r	2	0	3	"	1 70 d
Finisher.....	29	".....	".....	m	3	0	4	"	1 50 "
Carver.....	40	Canada...	Ireland...	w'r	0	0	0	sickness	3 30 "
Finisher.....	29	Holland...	Holland...	w'r	3	0	3	no work	1 50 "
Carver.....	17	Canada...	England...	s	...	...	0	.....	4 00 w
Finisher.....	28	Holland...	Holland...	s	...	...	0	no work	1 50 d
Varnisher.....	25	Michigan...	Scotland...	s	...	...	0	"	1 00 "
".....	25	Holland...	Holland...	m	2	0	3	no work	1 70 "
Finisher.....	25	".....	".....	s	...	...	0	"	1 60 "
".....	30	".....	".....	m	3	0	5 9	"	10 20 w
Painter.....	28	".....	".....	m	3	1	4 25	"	11 00 "
Machine hand...	16	".....	".....	s	...	...	0 2%	no work	4 00 "
Filler.....	22	Sweden...	Sweden...	s	...	...	0 6	"	1 00 d
Seamster.....	42	U. S.	Germany...	w'r	0	0	0 2	vacation	1 00 "
Oil rubber...	31	Holland...	Holland...	m	4	2	3 6	no work	3 00 w
Finisher.....	17	Brazil...	".....	s	...	...	0 1%	"	6 00 "
".....	29	Holland...	".....	m	3	0	4 8	"	1 60 d
".....	24	".....	".....	s	...	...	0 1%	"	7 50 w
".....	20	".....	".....	m	0	0	1 6	"	10 20 "
Upholsterer...	28	U. S.	Germany...	m	1	0	7	"	2 10 d
".....	36	Norway...	Norway...	m	1	1	4	"	2 50 "
".....	42	Germany...	Germany...	m	4	3	6	"	3 50 "
Finisher.....	24	Holland...	Holland...	s	...	...	3	"	1 60 "
".....	35	".....	".....	s	...	...	3	"	6 00 w
".....	32	".....	".....	m	0	0	10	"	2 00 d
Oil rubber...	33	".....	".....	m	5	3	8	"	10 20 w
Finisher.....	18	Brazil...	".....	s	...	...	1%	"	6 00 "
".....	27	Holland...	".....	m	3	0	1	"	9 60 "
".....	23	U. S.	England...	s	...	...	1%	"	9 00 "
Oil rubber...	33	Holland...	Holland...	m	5	3	8	"	10 20 "
Packer.....	53	".....	".....	w'r	3	4	8 7	.....	1 50 d
Finisher.....	19	Sweden...	Sweden...	s	...	...	0 7%	.....	6 00 w
Dauber.....	50	Holland...	Holland...	m	9	3	9 7	no work	3 00 "
Finisher.....	37	".....	".....	m	5	3	6 9	"	1 70 d

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, in- you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$473	0	\$385	\$100	\$900	no		\$6 00	no	none	1		1 35 00	15
488		385	100	0	"		6 00	yes	"	1			15
390		200	100	25	\$800	\$150			"	1			13
585			0	275	no			no	"			5 00	16
416	\$20		0	0	"			"	"	3			14
702	300	800	0	0	"		10 00	yes	organ	1		5 00	13
971		800	300	0	5,000			no	"	1			14
910		500	100	0	1,000	600		yes	none	1		14 00	14
681		680	0	0	no		5 00	"	organ	1		14 00	9
535		400	100	25	900			"	none	1		14 00	16
1,200	500		refuse	2,000	no			no	"	1	3	9 00	15
585			0	0	"			"	"			14 00	15
600			50	100	"			"	"			9 00	15
626		625	0	0	"		8 00	yes	"				12
508	0	350	80	0	900	500		"	"	1		5 00	12
280	10		0	0	no			no	"				12
273		278	0	0	1,400			yes	"	1			21
323			0	0	no			no	"	1	3		16
278	5		0	0	"			"	"				15
546	0	400	100	0	7,000	300		yes	accord'n	2		5 00	16
290		300	0	300	na		8 00	"	organ	1	1		15
442	3	382	50	0	1,000	700		"	none				11
488		487	0	0	1,000	250		"	"	2		9 00	18
516	60		0	0	no			no	"				13
438	50	438	0	0	400			yes	"	1			14
208			25	0	no			no	piano				15
478			0	0	"			"	none				9
490			0	150	"			"	"	1			16
442	0	442	0	0	550	302		"	"				9
468			0	0	no			"	"			6 00	22
442	0	442	0	0	"		7 50	yes	"	1			13
571	0	384	0	0	600	150		no	"				13
190			0	0	no			no	"				13
240	0		0	0	"			yes	"			8 00	14
290			0	0	"				"			4 00	29
348	0	348	0	0	1,000	900		"	"	1			11
280	0		0	0	no			no	"			3 50	15
416	0	416	0	0	1,000			yes	"				17
357	50		0	0	no			no	"	1		3 00	12
442		442	0	0	"		4 80	"	"				9
573		500	0	0	"		8 00	yes	organ	1	1	5 00	13
650	0	468	0	0	"		8 50	"	none	1	1	1,000	14
716		716	0	0	"		7 50	"	"	1		2,000	14
457	0		0	0	"			no	"	1		4 00	12
280	0		0	0	"			no	"			4 00	14
572	0	426	0	0	1,400			yes	organ				8
442	0	442	0	0	500	800		no	"				11
240	0		0	0	no			"	"			3 50	16
416	0	375	0	0	600	250		yes	"				14
390			0	0	no			no	"	1		3 50	15
442	0	442	0	0	"		5 00	yes	"				12
468	0	468	0	0	"		5 00	"	"	1			12
312	0		0	0	"			no	"			3 50	14
346	50	370	0	0	800	100		yes	"	1			12
570	0	570	0	0	700	200		no	"	1			12

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Varnisher.....	28	Holland..	Holland..	m	2	1	5	3	3	10	52	no work	\$1 60 d
Finisher.....	20	"	"	m	2	0	4	3	3	10	52	"	10 20 w
Filler.....	27	"	"	m	2	1	3	5	1	11	28	"	1 70 d
"	54	"	"	m	2	0	2	2	2	10	52	"	10 20 w
"	52	"	"	m	5	2	5	2	2	10	52	"	1 20 d
"	38	"	"	m	4	4	9	2	2	8	52	not in U. S.	1 16 "
Foreman.....	48	"	"	m	2	2	4	2	2	11½	7	no work	1 50 "
Filler.....	27	"	"	m	4	1	3	3	7	8	156	"	1 20 "
"	44	"	"	m	4	2	6	3	7	10½	30	"	1 20 "
"	43	"	"	m	8	4	7	3	5	10	52	"	1 20 "
"	30	"	"	m	0	0	1	1	1	10	52	"	1 20 "
"	22	Sweden	Sweden	s	0	0	0	1	1	12	52	"	1 20 "
Polisher.....	24	Michigan	U. S.	s	1	0	0	3w	3w	12	52	"	1 25 "
Danber.....	44	Holland	Holland	m	1	0	2	3	3	10	52	no work	1 20 "
Machine hand..	16	"	"	s	0	0	0	2½	½	11½	13	"	4 00 w
Laborer.....	45	"	"	m	6	1	7	7	7	11½	19	"	1 25 d
Lumber-piler..	41	Germany	Germany	m	3	2	6	6	2	11	26	"	1 25 "
Laborer.....	20	"	"	m	1	0	2	10	3	9½	72	"	1 25 "
Machine hand..	28	U. S.	U. S.	m	5	4	6	5	2	11½	13	"	2 00 "
Lumber-piler..	58	Holland..	Holland..	m	5	0	"	"	3	10½	30	"	1 25 "
Round-worker..	54	"	"	m	6	0	"	"	3	10½	30	"	1 25 "
Foreman.....	50	"	"	m	4	0	"	"	2	13	19	no work	1 50 "
Cabinet-maker..	42	U. S.	U. S.	m	1	1	"	"	3	11½	19	"	2 00 "
Machine hand..	14	Holland..	Holland..	s	1	0	"	"	1	12	52	"	3 50 w
Lumber-piler..	42	"	"	m	1	1	"	"	3	12	52	"	1 25 d
Cabinet-maker..	40	Germany	Germany	m	3	2	"	"	1w	10½	30	no work	1 75 "
Machine hand..	23	U. S.	France	m	2	0	"	"	11	12	30	"	16 00 w
"	18	Holland..	Holland..	s	5	0	"	"	2	11½	13	no work	5 00 "
Round-worker..	58	"	"	m	5	0	"	"	15	10	52	sickness	1 25 d
Gluer.....	29	U. S.	"	m	0	0	"	"	7	11	30	sick, no work	2 10 "
Cabinet-maker..	67	Germany	Germany	m	6	1	"	"	8	10½	30	no work	1 50 "
Round-worker..	50	Holland..	Holland..	m	3	0	"	"	17	12	30	"	1 25 "
Machine hand..	12	"	"	s	0	0	"	"	1m	12	52	"	2 50 w
Wood-worker..	26	U. S.	"	m	0	0	"	"	7	11½	19	no work	1 75 d
Filler.....	31	Holland..	"	s	3	1	"	"	1	10	52	"	1 20 "
"	32	"	"	w	3	1	"	"	7	10	52	no work, sick	1 40 "
"	37	"	"	m	4	2	"	"	2	11½	19	no work	3 00 w
Rubber.....	67	"	"	m	6	0	"	"	3	11½	19	"	1 40 d
Filler.....	24	"	"	s	0	0	"	"	1w	12	52	"	1 20 "
"	52	"	"	m	4	1	"	"	11	10	52	no work	1 20 "
Machine hand..	16	U. S.	"	s	0	0	"	"	1½	12	52	"	3 50 w
"	23	Holland..	"	m	0	0	"	"	2½	7½	117	sick, no work	2 25 d
Sand-paperer..	20	"	"	s	0	0	"	"	8m	8	117	first wrk in U. S.	1 00 "
Machine hand..	43	U. S.	U. S.	m	1	0	"	"	7	10½	30	no work	2 00 "
Cabinet-maker..	38	Holland..	Holland..	m	7	4	"	"	21	13	78	"	1 75 "
"	23	"	"	m	1	0	"	"	5	9	78	no work	1 75 "
"	53	Prussia..	Poland..	m	5	3	"	"	3	11½	18	"	10 00 w
Round-worker..	19	U. S.	U. S.	s	1	1	"	"	1½	8	104	"	1 25 d
Varnisher.....	33	Holland..	Holland..	m	1	1	"	"	"	11½	13	"	1 00 "
Machine hand..	48	Canada	Scotland	m	2	2	"	"	23	10½	30	"	2 50 "
Round-worker..	20	U. S.	Holland..	m	0	0	"	"	2	10½	30	"	1 50 "
Sweeper.....	15	Holland..	"	s	0	0	"	"	1	12	52	"	3 50 w
Cabinet-maker..	26	U. S.	Germany	s	0	0	"	"	1w	8	104	no work	1 50 d
"	29	Germany	"	m	2	1	"	"	6	9½	72	"	9 00 w

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Amount saved during the year.	Amount at interest in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
390	0	0	0	no		\$6 50	no	none	1							18
442	0	0	0	no	\$150		yes	"		1						11
488	0	0	0	600	300		no	"		1			300			9
442	0	0	0	3,000	650		yes	"		1						14
327	0	0	0	80	100		no	"								12
312	0	0	0	no		5 00	"	"								16
241	0	0	0	"		7 00	"	"								16
458	0	0	0	"		8 50	yes	"		1						13
187	0	0	0	"		4 00	no	"								12
527	0	\$15	0	700	600		"	"								12
812	0	0	0	no		5 00	yes	"								12
312	0	0	0	"		7 00	no	"								12
874	25	0	0	"			"	"				\$3 25				18
300	0	0	\$50	"			"	"				4 50				14
812	0	0	0	700	250		yes	"		1						12
199	0	0	0	no			no	"				*				12
428	0	300	0	"		5 00	"	"								12
357	0	357	0	"		5 00	"	"		1						8
300	0	300	0	"		8 00	yes	"		1				1	\$5 00	16
526	0	500	50	2,000			"	"				2,000		2	9 00	18
341	30	340	0	725	875		"	"								12
341	0	300	0	700	500		"	"								12
488	0	400	0	700	600		no	"								9
588	0	500	75	1,300			yes	organ	1			2,000		1	9 00	15
182	0	0	0	no			no	none		1		8 00				12
428	25	300	125	800			"	"		1	1					16
478	100	400	50	1,300	450		yes	"		1	1		2,000	1	4 00	12
522	0	332	0	no		5 00	"	"		1		1,250		2	14 00	12
349	0	0	0	"			no	"				3 50				12
325	0	300	0	400	100		yes	"			1					9
601	0	550	20	no		7 00	"	"			1			1	5 00	12
409	0	400	0	"		8 00	"	"			1					14
590	0	600	0	900	400		no	"						1	5 00	10
120	0	0	0	no			"	"								12
512	0	387	125	no		5 00	yes	"	1	1						15
312	900	0	900	"			no	"				8 00				12
354	300	350	0	500	250		yes	"		1				1	5 00	11
390	0	340	0	no		5 00	"	"						1	5 00	14
709	0	400	0	800	150		"	organ		2						15
374	0	0	0	no			no	none		1		8 00				12
312	0	700	0	600	400		yes	"		1						14
182	0	0	0	no			no	"				*				12
439	0	300	100	"		5 50	"	"						1	4 00	10
208	0	0	0	"			"	"								12
546	0	350	150	3,000	1,100		"	piano	1	1	2					16
546	0	600	0	1,500			yes	none		1	1				5 00	12
409	0	400	0	no		8 00	"	"		1	1		1,000	1	9 00	16
488	0	450	50	"		8 00	"	"						1	9 00	12
260	0	0	0	"			no	organ		1		5 00		1	5 00	15
299	0	350	0	500	500		"	none								14
683	0	450	200	2,500			yes	"	1				2,000	2	9 00	19
409	0	300	30	no		6 00	"	"		1				1	5 00	16
182	0	0	0	"			no	"								14
312	0	0	0	"			"	"		1		8 00				15
300	5	250	0	250	250		yes	"		1				1	5 00	6

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for	Employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Cabinet-maker.	31	U. S.	Germany	m	1	0			11	26	no work	\$2 00 d
"	31	Sweden	Sweden	s	1	0			9	78	"	8 50 w
Veneer-worker.	30	U. S.	U. S.	m	2	1			9	78	"	10 00 "
"	48	Holland	Holland	m	4	2			11	26	"	1 75 d
Cabinet-maker.	38	Canada	Scotland	m	8	2			11½	13	"	2 50 "
"	46	Austria	Austria	m	2	0			9½	79	"	1 75 "
Round-worker.	19	Holland	Holland	s					11½	18	"	5 50 w
Machine hand.	17	"	France	s					11	26	"	5 75 "
Cabinet-maker.	40	Scotland	Scotland	m	4	2			12		"	2 00 d
Veneer-worker.	32	"	"	s					11½	6	no work	10 00 w
Sand-paperer.	60	Holland	Holland	w'r	4	0			10	53	"	1 00 d
Helper.	19	Michigan	"	s				w	10	52	"	5 00 w
Machine carver.	16	Holland	"	s					10	52	"	7 50 "
Stock man.	25	Ireland	Ireland	s					5		first work in U. S.	1 25 d
Packer.	31	Michigan	U. S.	s					11½	19	no work	1 50 "
"	39	Holland	Holland	m	4	2			11½	19	"	1 50 "
Trimmer.	34	Michigan	U. S.	m	1	0			11½	19	"	10 00 w
Machine hand.	30	Holland	Holland	s					11	26	shut down	1 00 d
Teamster.	36	New York	"	s					12		"	1 50 "
Packer.	31	Michigan	"	s				m	10	52	no work	1 37 "
Sawyer.	39	Canada	U. S.	m	1	0		m	11	26	shut down	2 00 "
Filler.	39	Vermont	"	s					11	26	"	2 50 "
Machinist.	27	Holland	Holland	m	1				11½	19	repairing	2 25 "
Machine hand.	36	Michigan	"	m	0				11	26	"	2 15 "
Cabinet-maker.	36	New York	U. S.	m	4	3			9	78	sickness & no w'rk	10 50 w
Sawyer.	38	Germany	Germany	m	3	0			11	26	no work	2 25 d
Packer.	36	Michigan	Holland	m	0				11	26	"	1 50 "
"	31	"	U. S.	s					9	78	"	1 50 "
Varnisher.	40	Holland	Holland	m	4	2			10	53	"	1 25 "
Sawyer.	34	"	"	m	3	0			12		"	1 57 "
Cabinet-maker.	28	Denmark	Denmark	m	0				10	53	no work	12 00 w
"	28	Michigan	Germany	s					11½	13	"	10 00 "
"	31	"	Ireland	s					12		"	1 50 d
"	33	Indiana	U. S.	m	0				10	53	no work	1 50 "
"	29	Michigan	Poland	m	1	0			10	52	"	2 25 "
"	17	Poland	"	s					10	53	"	4 00 w
"	43	"	"	m	6	2			10	53	"	10 00 "
"	27	Holland	Holland	m	3	1			10	52	"	12 00 "
Packer.	24	"	"	m	0				11	26	"	1 50 d
Cabinet-maker.	37	"	"	m	2	1			9	78	sickness & no w'rk	1 25 "
"	19	"	"	s					10	53	no work	1 00 "
Varnisher.	33	Sweden	Sweden	m	1	0			11	26	"	1 70 "
Rubber.	33	Holland	Holland	m	2	0			11½	19	"	1 50 "
Millwright.	55	New York	U. S.	m	4	0			12		"	12 00 w
Apprentice.	17	Michigan	Holland	s					4		first work	8 00 "
Finisher.	42	Holland	"	m	2	1			11½	18	sickness	1 70 d
Rubber.	28	"	"	s					11½	19	no work	1 50 "
"	38	"	"	m	3	1			11½	6	"	1 70 "
"	39	"	"	m	3	2			12		"	1 70 "
"	36	Norway	Norway	m	3	1			11½	19	no work	1 70 "
Finisher.	30	Sweden	Sweden	s				m	7½		first wrk in U.S.	1 00 "
Upholsterer.	28	Holland	Holland	m	1	0			11	26	fire in factory	14 17 w
Varnisher.	24	"	"	s					11	26	no work	1 70 d
Sales-woman.	28	Canada	Scotland	s					12		"	7 20 w
Finisher.	42	Sweden	Sweden	s					10½	26	no work	6 49 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
572	0	\$450	\$100	0	\$1,100	\$325		yes	none	1					1	\$9 00	16
831	0		0	0	no			no	"		1		\$3 00		1		7
390	0	388	0	0	no		\$7 00	yes	"						1	5 00	18
500	0	500	0	0	700	100		"	"		1				1	5 00	17
747	0	250	500	0	3,500			"	piano	1				\$3,000	1	9 00	12
421	\$100	350	58	0	800			"	none		1				1	9 00	12
274			0	0	no			no	"		1		5 50				12
274			0	0	no			no	"		1		4 75	300			13
624	25	600	0	0	"		6 00	yes	piano	1			4 00	2,000	1	9 00	15
508	80		200	0	"			no	none		2				1	5 00	14
280	40	280	0	0	800	400		yes	"		1						10
217			*	0	no			no	"				*				14
325				0	"			"	"								18
162	15		0	0	"			"	"		1		4 50		1	6 00	18
438			0	0	"			"	"		1		4 00		1	10 00	17
438	0	400	0	0	800	200		yes	"						1	5 00	13
497		450	0	0	1,500	800	10 00	"	"								17
286			*	0	no			no	"				*				15
468			0	0	"			"	"				3 50				13
356			*	0	"			"	"								14
572		200	50	\$300	"		8 00	yes	"	1					1	9 00	14
715		250	4,500		"			no	"	1			+		1	5 00	18
658		400	150	0	800	250		yes	"	1	1				1	5 00	15
615		450	150	140	900	200		"	"	1	2				2	5 00	9
408		408	0	0	no		10 00	"	"	1	1				1	9 00	15
668		668	0	0	2,000	1,000		"	"	1	1				1	9 00	14
429		400	0	0	no		5 00	"	"								13
351			0	0	4,700	700		no	"				8 00				15
325	0	268	0	0	no		6 00	yes	"								8
490		490	0	0	500	800		"	"		2				1	5 00	14
520	0	520	0	0	no		8 00	"	"						2	14 00	15
498			0	0	"			no	"		1		4 00				13
468			0	0	"			"	"	1	2		4 00		1	9 00	12
380		300	30	0	"		6 00	"	"						1	9 00	15
585		300	0	0	"		12 00	yes	"				8 50		1	5 00	14
173			*	0	"			no	"				*				15
438	23	350	0	0	900	800		yes	"		1				1	5 00	14
520		300	0	0	500	150		"	"		4						10
430	0	429	0	0	800	500		"	"	1	2				1	5 00	13
311		300	0	0	450	800		"	"								14
280			*	0	no			no	"				*				13
496		496	0	0	"		4 50	yes	organ								13
438	0	438	0	0	"		5 00	"	none						1	5 00	15
624		221	* 400	0	"		7 00	no	organ		2				1	9 00	16
53				0	"			"	none				*				16
508	0	400	0	0	"		6 00	yes	"	1					1	9 00	16
468	0		0	0	"			no	"				3 50				11
519	0	320	200	0	900	500		yes	"		2						15
530	0	530	0	0	1,400	900		"	"		1			2,500	1	5 00	9
497	100	497	0	0	no		7 00	"	"						1	5 00	17
188	0		0	0	"			no	"				8 00				19
676		676	0	0	"			yes	"	1	2		3 00		1	9 00	12
496			50	0	850	250		no	"				3 00				16
374			0	100	no			"	piano		8	2	3 50				23
382	0		0	0	"			"	none				4 00				15

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of time during the year.	Cause for loss of time.	Wages received.
Oil rubber	39	Holland	Holland	m	4	2	5	11	11	11½	18	no work	\$1 70 d
Mach. carver	18	Michigan	Germany	s	—	—	0	4	10d	11½	19	sickn's & no wrk	12 00 w
Sander	16	"	Poland	s	—	—	0	—	1m	6	188	no work	8 50 "
Finisher	19	"	Germany	s	—	—	0	1½	1½	10½	80	"	8 50 "
Carver	16	Holland	Holland	s	—	—	0	1w	1	11½	6	"	2 00 d
Sander	1	—	—	s	—	—	0	½	3w	12	—	—	8 50 w
Carver	23	—	ia.	m	1	0	2	18	8m	11	28	no work	8 50 d
Mach. carver	23	—	any	s	—	—	0	8m	2w	11½	18	sickness	2 00 "
Finisher	23	—	sm	s	—	—	0	½	½	11½	19	no work	1 00 "
Upholsterer	23	—	ind	m	2	1	8	16	2	12	—	—	3 50 "
Rubber	23	—	—	m	8	0	4	14	5	11½	19	no work	1 00 "
Teamster	41	—	nd	m	11	3	12	27	27	12	—	—	10 50 w
Oil rubber	23	—	—	m	4	2	6	6	8	10	52	no work	8 00 "
Teamster	23	—	—	m	9	4	10	30	15	12	—	—	10 00 "
Carver	23	—	any	m	0	0	1	11	5w	6½	188	no work	15 00 "
"	23	Michigan	Ireland	s	—	—	0	7	1m	11	26	"	15 00 "
"	27	England	England	s	—	—	0	9	2m	10	52	vacation	19 00 "
Cabinet-maker	43	Germany	Germany	m	4	1	8	18	7	12	—	—	12 00 "
Carver	21	Michigan	Canada	s	—	—	0	2	3	12	—	—	7 50 "
"	17	"	Germany	s	—	—	0	1½	1½	11½	18	no work	4 00 "
"	25	Germany	"	m	7	3	8	18	2m	12	—	—	15 00 "
"	26	Illinois	"	s	—	—	0	10	2m	9	78	no work	15 00 "
"	29	Germany	"	s	—	—	0	15	2m	10	52	"	18 00 "
Wood worker	39	Holland	Holland	m	1	1	2	23	28	11½	18	sickness	1 50 d
Foreman	24	New York	New York	s	—	—	1	15	1	12	—	—	8 50 "
Laborer	41	Holland	Holland	m	7	3	8	3	3	11	20	sickness	1 25 "
Dry kiln	43	Michigan	U. S.	m	1	0	3	8m	8m	12	—	—	1 50 "
Carver	24	Holland	Holland	wr	8	3	3	16	5w	11	26	no work	13 00 w
"	14	Penn.	U. S.	s	—	—	0	7m	1½	12	—	—	4 00 "
"	20	"	Germany	m	1	0	2	15	5w	9	78	"	3 30 d
Trucker	47	Holland	Holland	m	1	0	2	11	11	11	26	no work	1 25 "
Machine-hand	23	Michigan	"	s	—	—	0	5	4	10	52	"	1 50 "
Trucker	37	Ireland	Ireland	s	—	—	0	6	6	10	52	"	1 25 "
Dry kiln	21	Canada	Canada	m	1	0	2	½	½	12	—	—	1 50 "
Carver	20	"	Scotland	m	1	0	2	7	2	10	52	no work	19 80 w
Shipping clerk	55	Holland	Holland	m	3	3	7	24	24	12	—	—	2 00 d
Lumber man	50	Kentucky	England	m	2	1	8	28	7	12	—	—	25 00 w
Carver	23	Germany	Germany	m	1	0	2	18	2m	11	26	—	19 80 "
"	23	Michigan	U. S.	m	0	0	1	15	4	11	26	—	19 80 "
Cabinet-maker	27	New York	Holland	m	7	4	8	20	13	12	—	—	12 00 "
Laborer	48	Holland	"	m	4	1	5	20	20	11	26	—	1 25 d
"	48	"	"	m	2	1	3	8	8	12	—	—	1 25 "
Carver	31	Ohio	Germany	s	—	—	0	10	6w	5	182	sickn's & no wrk	3 00 "
"	20	Michigan	U. S.	s	—	—	0	2½	2½	9	78	no work	1 25 "
" foreman	58	Scotland	Scotland	m	6	1	5	45	½	10	52	"	4 00 "
"	22	Wisconsin	U. S.	m	2	0	3	11	8	12	—	—	8 50 "
"	43	England	England	m	2	0	8	20	1	9	78	no work	19 00 w
"	57	"	"	m	5	0	8	42	5	11	26	"	8 50 d
"	28	Michigan	U. S.	m	0	0	1	17	24	12	—	—	19 80 w
Trimmer	28	Mass.	England	m	0	0	1	10	10	12	—	—	10 50 "
Cabinet-maker	50	Germany	Germany	m	7	4	8	35	11	12	—	—	2 50 d
Finisher	24	Holland	Holland	s	—	—	1	4	4	12	—	—	8 40 w
Carver	26	Michigan	U. S.	s	—	—	0	9	9	11	26	no work	8 30 d
Machine-hand	29	Holland	Holland	m	2	1	8	14	12	11	26	"	2 00 "
Marker	34	"	"	m	3	2	3	7	6w	11	26	"	2 00 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.		
										Daily papers.	Weekly papers.	Magazines.
3503	\$200	\$510	0	0	\$2,000	\$100	\$4 00	yes	none		1	
535			0	0	no			no	"			
78			*	0	"			"	"			
298			*	0	"			"	"			
611			*	0	"			"	"			
182			*	0	"			"	"			
944	150	600	0	0	"		10 00	yes	"	1		1
598			0	0	700	200		no	"		1	
302	0		0	0	no			"	"			
1,082		600	150	0	4,700	1,500		yes	piano	1	1	1
488		488	0	0	no		6 50	"	none	1		
545		500	0	0	"			"	"	1	1	
848	0	848	0	0	700	500		no	"	1		1
630	400	800	0	0	2,000	400		yes	"	1	1	
408	0	350	0	0	no			no	"			
715			0	0	"			"	"			
823	200		100	0	"			"	"	1	1	
624	0	450	0	0	900	700		yes	piano		2	
990			0	0	no			no	none			
199			*	0	"			"	"			
780	0	400	0	0	"		6 50	yes	"			
585			50	0	"			no	"			
780	80		0	50	"			"	"	2		
448	0	800	0	0	"		12 00	yes	organ		2	
1,082			refuse	refuse	refuse	refuse		no	none	2		
367	0	350	0	0	no		5 00	yes	"			
468		600	0	500	2,000			"	"	1	1	2
838		858	0	0	2,000			"	"	1	2	law
208			*	0	no			no	"			1
772		800	0	0	"		10 00	yes	"	1		
607	0	312	0	0	800			"	"			
390			0	0	no			no	"			
825	0		0	0	"			"	"			
468		312	0	0	"		6 00	"	"		1	
868		1,000	0	0	"			yes	piano	2		
824	0	624	0	0	1,200			"	none	1		
1,300		800	400	0	2,500	800		"	"	3	3	
944		416	0	0	1,400	800		"	"	1		
944		800	0	0	1,500	560		"	"	2		
624		624	0	0	no		9 00	"	"	1	1	
837	0	357	0	0	1,000	800		"	"			
390	0	390	0	0	500			no	"			
290			0	0	no			"	"			
292			*	0	"			"	"	2	1	
1,200	0	250	400	0	"		7 00	yes	piano	4	1	
1,082		600	90	0	1,400	250		"	none	1		1
1,052	0	275	0	0	no		8 00	no	harm'ca	1	2	
1,300	50	600	0	0	"		12 00	yes	piano		2	
1,080		600	200	0	2,200	800		"	none	2	4	1
548		548	0	0	no		10 00	"	"	2		
1,082		780	0	0	1,800			"	organ	1		1
437		437	0	0	no			no	none	1		
944			50	0	"			"	"	2	1	
572		572	0	0	1,400	350		yes	"			
572		572	0	0	700	500		"	"		1	

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Members of household attending school.	Are you for or against conscription?	Recent employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Cabinet-maker.	21	Germany	Germany	s				12	12			\$1 50 d
"	45	Penn.	"	m	1	0		1	11	28	no work	15 00 w
Tenile saw.	14	Holland	Holland	s				2	11½	19	"	2 50 "
Cabinet-maker.	24	England	England	s				7	12			2 00 d
Laborer.	51	Holland	Holland	m	0	0		30	11½	13	no work	1 25 "
Machine hand.	40	Mass.	U. S.	s				13	12			2 50 "
"	24	Holland	Holland	s				14	11½	13	repairing	3 00 "
Sander.	29	Penn.	U. S.	m	2	0		10	12			2 00 "
Packer.	16	Holland	Holland	s				1	11	26	no work	1 60 "
"	20	"	Holland	s				8	10	32	"	1 57 "
Cabinet-maker.	46	Prussia	Prussia	m	6	3		7 4	8 9	104	"	12 00 w
Carver.	35	Holland	Holland	wr	1	1		1 15	6w 12			3 30 d
Finisher.	39	"	"	m	1	1		2 3	3 11½	19	no work	1 60 "
Elevator-boy.	14	Michigan	"	s				0 3	3 5½		first work	2 50 w
Finisher.	24	Holland	"	m	1	0		2 3	14 10½	30	no work	1 50 d
Foreman.	35	Michigan	U. S.	s							first wrk in U.S.	2 00 "
Lugger.	25	Ireland	Ireland	s							"	1 25 "
Cabinet-maker.	47	New York	U. S.	m	1	0			104		no work	10 00 w
"	33	Michigan	Holland	m	2	0			78		"	2 00 d
"	19	"	Ireland	s					78		sick and no wrk	9 50 w
"	61	Mass.	England	m	1	0			52		no work	10 00 "
"	56	England	"	m	8	0			28		"	15 00 "
"	30	Canada	"	s					26		"	3 50 d
"	69	N. J.	U. S.	m	7	4			52		"	8 00 w
"	17	Germany	Poland	s					156		"	70 d
Packer.	53	Holland	Holland	m	4	1			19		"	1 50 "
Cabinet-maker.	29	Michigan	U. S.	m	3	0			78		no work	10 00 w
Trimmer.	27	"	Germany	m	0	0			78		"	10 00 "
Teamster.	44	Holland	Holland	m	6	2			104		no work	9 45 "
Trimmer.	52	Michigan	France	m	1	0			78		"	10 00 "
"	30	Holland	Holland	m	2	1			78		"	10 00 "
"	26	Austria	Austria	s					78		"	10 00 "
Machine hand.	51	Holland	Holland	s					120		not ans	5 00 "
Packer.	43	Maryland	U. S.	m	6	3			78		no work	10 60 "
Machine hand.	30	Wisconsin	Germany	m	1	1			26		"	14 00 "
Cabinet-maker.	36	Holland	Holland	s							not in U. S.	7 50 "
Yard man.	55	"	"	m	7	2					"	1 25 d
Machine hand.	33	New York	"	m	2	0					"	10 50 w
Carver.	15	Canada	Canada	s					11		not ans	3 50 "
Sand-paperer.	17	New York	Holland	s					19		no work	3 75 "
Carver.	18	Denmark	Denmark	s					52		"	1 50 d
"	25	New York	Ireland	m	0	0			52		"	3 30 "
"	38	"	Germany	m	4	3			65		unsteady	3 30 "
Foreman.	46	Germany	Portugal	m	2	2			52		no work	3 75 "
Carver.	17	Canada	Canada	s					52		"	4 50 w
Polisher.	16	Michigan	Holland	s					13		"	3 75 "
Cabinet-maker.	19	"	England	s					104		"	10 00 "
"	41	New York	U. S.	m	0	0			26		"	12 00 "
"	34	Michigan	Germany	s	0				13		holidays	3 50 "
"	36	"	Ireland	m	0	0			26		no work	12 00 "
"	39	Indiana	Germany	m	2	1			52		"	2 50 d
"	30	Wisconsin	U. S.	m	2	1			52		"	3 50 "
Trimmer.	56	Ohio	"	wr	3	0			91		"	10 00 w
Stock keeper.	26	Holland	Holland	m	4	3					"	11 00 "
Machine hand.	40	New York	U. S.	m	0	0			104		sick and no wrk	1 50 d

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.		If mortgaged, for what amount.	If renting house, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.	
\$468		\$468	0		00	\$800	no	either						16	
716		366	0				yes	none	1		\$2,400	1	9 00	11	
122			*				no	"						12	
634			0				"	"	1		3 00	1	9 00	10	
\$74	0	874	0		00		"	"						11	
730		330	\$300			7 50	"	"	1					12	
598			150		50		yes	"	2				9 00	12	
624		300	100		50	450	"	"	1		2,000	2	9 00	19	
298	0		*				no	"						10	
408	0	366	0		00		yes	"	1					16	
416	\$8	752	100		00		"	organ	1	1				14	
1,080			0				no	none	1		5 00			20	
488	7	468	0		00	9 00	yes	accord	1					18	
87			*				no	none			*			14	
408	0	400	0		00	450	yes	"	1					17	
624			0		00	no	no	"	1		5 00	1,000	2	6 00	10
142	20		0		00	"	"	melod	1		4 50		1	6 00	18
347		347	0		00	8 00	yes	none	1					12	
468		468	0	200	1,500	650	"	"	1				1	6 00	16
870			0	0	no		no	"			3 00			18	
433		366	100	1,000	3,500		"	"	2		2,000			18	
715		550	0	0	no		yes	piano	1	1			1	9 00	19
715			0	0	"		no	none			4 00		1	9 00	15
300		281	0	0	1,800	800	yes	organ	1				1	5 00	15
109			*	0	no		no	none			*			16	
438	3	350	50	350	1,000		yes	"		1				10	
580		400	0	0	no	6 00	"	"	1				1	5 00	15
300		300	0	0	no	8 00	"	"	1					12	
491	0	491	0	0	1,600	800	"	"	2				1	9 00	8
347		347	0	0	2,500		"	"	2					9	
300		410	0	0	1,300	700	"	organ	1				1	5 00	15
300	0		0	0	no		no	none	1	1	4 00		1	9 00	14
152	0		0	0	"		"	"	1	1	8 50		1	6 00	14
409		409	0	0	1,900	600	"	"	1					15	
997		280	150	0	2,000		yes	"	1					14	
280	0		0	0	no		no	"		1	3 50			17	
401	0	530	0	0	700	150	yes	"						10	
546		384	0	0	no	8 00	no	"				1	9 00	12	
167			*	0	"		"	"			*			14	
133			*	0	"		"	"			*			14	
300			0	0	"		"	"			3 50			16	
259		520	0	0	"	9 00	"	piano	3	1			1	5 00	12
816		580	0	0	"	12 00	yes	none	1	3	4 50	2,000	4	10 00	15
1,170	0	1,170	0	0	"		no	piano			*			15	
195			*	0	"		no	none						15	
197			*	0	"		"	"	1					18	
347			0	0	"		"	"			4 50			12	
572		572	0	0	"	7 00	"	"	1	1				14	
424		364	100	100	1,300		yes	"	1				1	9 00	12
572		572	0	0	1,300	600	no	"	2					12	
650		468	0	400	3,000		yes	"	1	1			2	14 00	14
951		630	0	0	1,300	600	"	"	1				1	9 00	15
303			40	110	no		no	"	1	1	8 00			14	
572	0	572	0	0	"	6 00	yes	"	1		2,000	1	9 00	12	
812		312	0	0	"	8 00	"	"	1			1	6 00	11	

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Cause for loss of time.	Wages received.
Machine-hand	33	Holland	Holland	m	0	no work	\$3 30 d
"	37	"	"	m	0	"	1 80 "
"	38	"	"	m	0	"	2 00 "
"	16	Michigan	U. S.	s	0	no work	2 50 w
Carver	12	"	Russia	s	0	"	4 00 "
Machine-hand			Holland	s	0	"	6 00 "
Machine carver			England	s	0	"	5 50 "
Machine-hand			Holland	s	0	"	8 50 "
"			U. S.	m	0	"	2 25 d
Helper			Holland	m	1	no work	1 25 "
Oil finisher			"	m	0	"	7 50 w
Mill-wright			U. S.	m	0	"	2 50 d
Cabinet-maker			Germany	s	0	no work	8 00 w
"			Denmark	m	0	"	10 50 "
"			France	m	0	"	12 00 "
"			Sweden	s	0	"	1 15 d
"			Holland	m	1	"	2 00 "
"	37	Holland	Holland	m	0	"	8 00 w
Stock-keeper	31	Canada	U. S.	m	0	"	2 00 d
Cabinet-maker	24	"	"	s	0	no work	10 00 w
Machine-hand	14	Holland	Holland	s	0	"	3 00 "
Cabinet-maker	25	Germany	Germany	s	0	no work	12 00 "
"	15	Michigan	England	s	0	"	6 00 "
"	18	"	Canada	s	0	"	4 50 "
Packer	33	Illinois	U. S.	m	1	"	9 75 "
BERKEY & GAY FURNITURE CO.							
Cabinet trimmer	40	Sweden	Sweden	m	0	"	10 00 "
Cabinet-maker	40	"	"	m	0	"	1 90 d
"	30	"	"	wr	0	"	1 50 "
Finisher	39	Michigan	Holland	m	0	"	11 10 w
"	32	Holland	"	m	0	ickn'as & no wk	1 75 d
"	30	Penn	Ireland	s	0	sickness	1 75 "
"	31	Holland	Holland	m	0	no work	1 40 "
"	18	"	"	m	0	"	9 00 w
"	12	"	"	m	0	"	1 40 d
Stock-man	11	"	"	m	0	"	1 40 "
Finisher	21	"	"	m	0	"	9 50 w
"	35	Canada	Canada	s	0	"	1 75 d
Teamster	35	Holland	Holland	m	0	sickness	9 00 w
Laborer	40	"	"	m	0	"	1 25 d
Carver	24	England	England	s	0	vacation	12 00 w
"	26	Germany	Germany	m	1	sickness	3 30 d
"	31	Michigan	"	s	0	vacation	15 00 w
"	26	Canada	Scotland	m	0	sickness	19 00 "
"	42	"	U. S.	wr	0	"	10 00 "
"	22	Denmark	Denmark	s	0	ickn'as & strike	16 00 "
"	35	"	"	m	0	"	18 00 "
"	30	Canada	England	m	0	vacation	15 00 "
"	31	Michigan	Germany	m	0	"	15 00 "
Machine-hand	29	Ohio	U. S.	m	1	no work	1 70 d
Cabinet-maker	34	Germany	Germany	m	0	"	2 00 "

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
5329	0	\$650	0	0	\$1,500	\$125		yes	none						9
488	0	468		0	900					1				\$5 00	14
572	0	572	0	0	1,300					1				6 00	12
108			*	0	no			no							13
190			\$25	\$25							\$2 50				15
238			*	0							*				13
286				0								\$110			15
182			14	0							2 25				13
702		364	0	0			\$7 00	yes	piano	1	2		1	9 00	12
357	\$100	843	0	0	1,800	200		yes	none		3				13
357	0	380	0	0	no		6 00	no				50			14
780		780	0	0	1,300			yes	organ		1	2,000	1	9 00	18
346	0		0	0	1,300				none		2				17
364	0	280	0	0	no		5 00	no					1	9 00	14
968	300	600	0	0	2,000	200		yes		1	2	4,000	1	9 00	18
455	0		0	0	no			no				4 00	1	5 00	7
520	0	268	0	0			7 00	yes		2	1	2,000	2	14 00	13
812	0	812	0	0	450	172					1				14
624	480	500	0	0	no		7 00				2		1	9 00	13
477	100		0	0				no			1	8 75	2,000		18
156			*	0											12
520	0		0	0							4	4 00	1	5 00	11
208			0	0							1	3 00			13
196			0	0							1	1 50			15
369		360	0	0	1,200			yes		1			2	10 00	9
483	0	560	0	0	no		5 00			1	1	1,000			16
494	0	494	0	0	1,000	500					1	2,000	1	5 00	13
486	86		0	200	800			no				3 50			14
481		481	0	0	no		8 00	yes			2		1	5 00	14
456		456	0	0			6 00				1		1	5 00	14
478			0	0											
400	100	360	0	0			5 00	no		1		4 00			12
429	20	429	0	0	600	200					1		1	5 00	10
559	0	360	0	0	700	425		yes					1	5 00	12
419	0	419	0	0	1,300	300							1	5 00	12
370	100	370	0	0	no		7 00				1				14
455	10	455	0	0			6 00	no	organ	1	1				16
458	0	360	0	0	900	500		yes	none						13
465	0	300	0	0			5 50								12
897		refuse	0	0				no		1	1	4 00		5 00	15
966	0	450	0	0			6 50	yes		1				5 00	13
721			0	200				no				5 00		5 00	13
906		906	0	0	refuse	refuse	refuse			1	2	8,000	3	5 00	18
520			0	0	no					1		5 00	1	5 00	16
897			0	0						1	1	6 00	2	5 00	14
897	0	450	0	0			8 00	yes		1			2	5 00	14
858	refus'd	858	0	0	refuse	refuse	refuse	no				3,000			15
936		936	0	0			6 00							5 00	14
309		250	0	50	no		7 00							5 00	10
624	450	500	50	0	1,000	300		yes			2	2,000	1	5 00	16

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Amount saved during the year.	Amount of interest in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
									Daily papers.	Weekly papers.	Magazines.					
2439			0	no		\$7 00	yes	piano	1							15
883	\$16		0	\$1,500	\$1,100		"	organ							\$5 00	14
883			0	1,000	400		"	none	1							17
456	50		0	no		8 00	"	organ		1					8 00	15
156	20		0	400	800		no	none								9
780			0	refuse	refuse	refuse	"	"						20	5 00	14
572	8		0	800	800		yes	"	1					1	5 00	14
448	0		0	no		7 00	"	"	1	1						15
858	60		0	2,000			"	"			1			1	5 00	10
428		48	0	700	800		"	"		law					5 00	7
385	0		0	no			no	"		2		\$4 00		1	5 00	11
588		\$100	\$110	"		8 00	"	piano	1	1				1	5 00	18
634	50		20	"		6 00	yes	none		2				1	5 00	17
585		75	0	1,500	700		"	organ		1						13
578	15		0	no		7 50	"	none		1				1	5 00	18
148		*	0	"			no	"				*				14
374	0		0	"		8 00	yes	"								12
498	0	50	450	500			"	"		2				1	5 00	14
987		0	0	refuse	refuse		"	"	1	1		\$8,000		2	5 00	14
612	0		100	800	700		no	"		1				2	5 00	14
987	0		120	900			yes	organ		2				2	10 00	14
1,248		900	0	1,000	200		"	piano	1	2				1	5 00	15
858		*	0	no			no	none	1	1		*		1	5 00	18
916		\$16	refuse	2,300	refuse		yes	organ	1				3,000	1	5 00	17
897		200	400	no			no	guitar				4 50		1	5 00	18
498	0		0	1,000	500		yes	none		1				1	5 00	6
477		300	100	500			"	organ	1	1						19
573		400	200	600			no	accord'n	1	1		5 00		1	5 00	16
381	0		50	"			no	organ				8 00				10
301	15		0	"			"	none				8 25				14
349	0		0	"			"	"		1		4 00				13
500	0	500	0	1,000			yes	organ		1				1	5 00	16
497	0	400	0	450	450		no	none						1	5 00	10
632		450	100	no		9 00	yes	piano	1					2	5 00	12
436	100	850	0	"		5 00	no	none	1					1	5 00	16
316		*	0	"			"	"				*				13
169		*	0	"			"	"				*				13
508	0	400	100	100			yes	"	1	1				1	5 00	14
568	200	800	0	2,000			"	"		8				2	5 00	15
458			0	no			no	"				8 00				15
252			0	"			"	"				8 00				18
530	0	475	0	800	800		yes	"		2				1	63	14
702		702	0	1,000			"	organ	1	1		1,000		2	5 00	18
429		429	0	no		6 00	"	none	1					1	5 00	16
515	0	515	0	700	850		"	"						1	5 00	13
548		350	0	no		8 00	"	"				1,000		1	5 00	18
36			0	"			no	"				3 00				18
3			0	"			"	"				*				14
88			0	"			"	"				*				14
416		416	0	"		10 00	"	"		1				1	5 00	14
887	0		0	"			"	"	1			5 00		2	5 00	17
956		800	0	"		12 00	yes	guitar	1	1			3,000	2	5 00	14
174			0	"			no	none				*				12
546	60	400	0	"		8 00	yes	"	1	2		2,000		3	5 00	14
429	0		150	"			no	"				4 50				17

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for	Cause for loss of time.	Wages received.
Veneer-maker.	19	U. S.	Holland.	m					\$1 00 d
Sand-paperer.	18	"	"	s				work, sick	4 00 w
Machine hand.	24	Holland.	"	s				no work	1 25 d
Veneerer.	38	Denmark.	Denmark.	s					1 90 "
Polisher.	23	Holland.	Holland.	s				no work	8 00 w
Rubber.	30	"	"	m	3	0			1 50 d
"	33	"	"	m	0	0		no work	1 50 "
Machine hand.	36	Sweden.	Sweden.	m	1	0			1 75 "
Cabinet-maker.	30	U. S.	Germany.	s					1 50 "
Rubber.	40	Holland.	Holland.	m	4	0		no work	1 40 "
Polisher.	55	"	"	m	4	0			1 25 "
Rubber.	27	Denmark.	Denmark.	m	0	0		no work	1 25 "
Polisher.	32	Holland.	Holland.	s				"	1 40 "
"	33	"	"	s				"	1 25 "
Rubber.	31	"	"	s				at wrk in U.S.	1 25 "
"	40	"	"	m	6	4		ok, no work	10 00 w
"	33	"	"	m	3	0		no work	1 50 d
"	25	"	"	m	1	0		ok, no work	1 50 "
Dauber.	23	"	"	m	3	0		"	8 00 w
"	42	"	"	m	3	2		no work	1 40 d
Finisher.	30	U. S.	France.	m	2	0		"	11 10 w
"	18	"	Holland.	s				"	1 25 d
"	34	Canada.	Scotland.	m	0	0		"	8 00 w
"	35	Holland.	Holland.	m	1	0		ok, no work	1 50 d
"	23	"	"	s				not in U. S.	1 00 "
Rubber.	48	"	"	m	2	0		no work	8 00 w
Finisher.	35	"	"	m	3	2		"	11 00 "
Rubber.	22	"	"	s				"	1 50 d
Machine hand.	24	U. S.	"	m	3	2		"	1 50 "
"	30	"	U. S.	m	1	0			1 75 "
"	36	Holland.	Holland.	m	1	0			1 60 "
"	28	Canada.	England.	m	1	0		no work	1 75 "
Veneer cutler.	19	U. S.	Germany.	s				not want work	1 00 "
Machine hand.	18	"	"	s				first work	7 00 w
Cabinet-maker.	41	Germany.	"	m	5	3		no work	1 50 d
Carver.	37	U. S.	U. S.	s					18 00 w
Cabinet-maker.	44	Germany.	Germany.	m	5	3		no work	2 25 d
Machine hand.	18	U. S.	Holland.	s					10 00 w
"	15	Holland.	"	s				no work	3 00 "
"	56	France.	France.	m	1	1			2 50 d
Packer.	14	Michigan.	Holland.	s				no work	3 00 w
Fireman.	34	Ohio.	England.	m	4	3			1 75 d
Varnisher.	24	Holland.	Holland.	m	0	0		no work	1 50 "
"	23	"	"	m	1	0		"	9 00 w
"	22	"	"	s					1 50 d
Oil finisher.	41	Ireland.	Ireland.	m	6	4			1 75 "
"		"	land.	m	1	0		work, sick	10 50 w
"		"	"	m	7	3			1 25 d
"		"	"	s					3 00 w
"		"	land.	s				no work	1 75 d
"		"	S.	m	2	3			2 70 "
"		"	eden.	m	7	2		no work	11 50 w
"		"	land.	s				ok, vacation	4 00 "
"		"	land.	m	1	0			1 40 d
"		"	and.	s				knees, repairs	3 00 w

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
3312			*	0	no			no	none	1							14
191			0	0	no			no	no				\$8 50				11
357			0	0	no			no	no				8 50			\$5 00	9
593	\$25		\$50	200	no			no	no	1	1		4 00		1	5 00	9
331	0		0	0	no			no	no	1			3 50		1	5 00	11
468	0	\$400	50	0	no	\$300		yes	no		1						14
448	0	375	25	100	no	600		no	no		1				1	5 00	12
523	0	500	0	0	no		\$5 00	no	no		1						14
462		refuse	refuse	refuse	no			no	no		1	1	4 00		1	5 00	13
519	0	500	0	0	no		8 00	no	no		1	1			1	5 00	12
350	0	300	50	0	no		5 50	yes	no								12
374	0	350	0	0	no		5 00	no	no						2	10 00	12
419	0		100	200	no			no	harmon.		1		3 00		1	5 00	12
374	0		50	0	no			no	no		1		3 00				12
196	0		0	0	no			no	no				3 50				15
487	0	450	0	0	no		5 00	yes	no		1				1	5 00	11
448	0	450	0	0	no	400		no	no								18
812	0	300	0	0	no		6 00	no	no		1				1	5 00	9
311	0	300	0	0	no		5 00	yes	no		1				1	5 00	14
364	0	350	0	0	no	500		yes	no		1				1	5 00	15
553		500	0	0	no		7 00	no	no		1	2			1	5 00	13
325			0	0	no			no	no				3 00				12
407	0	350	0	0	no		5 00	yes	no	1					1	5 00	14
429	0	375	25	0	no	700	500	yes	no				3 00				14
156	0		0	0	no			no	no								15
499	0	350	50	0	no	600	300	no	no		1	1					12
534		500	0	0	no	1,000	400	yes	no	1					1	5 00	15
448	0	50	150	0	no			no	no				†				13
448		400	50	0	no	700		yes	no		1						10
546		300	200	0	no	1,800	1,000	yes	organ					\$1,000	1	5 00	15
499		450	0	0	no	600	500	no	no								14
523	0	400	100	300	no		5 00	no	no	1					1	5 00	5
224		50	0	0	no			no	bjo, ac'n	3	4	2	3 00				15
61			0	0	no			no	no				3 00				17
380	1,400	350	0	0	no	1,200		yes	no		1			2,000	1	5 00	10
986			0	0	no			no	no	1		1	†				18
648	100	550	0	0	no		8 00	yes	no	1	1			1,000	2	10 00	17
520			0	0	no			no	no				4 00				12
152			*	150	no			no	no								12
780		600	300	2,000	yes	organ		yes	organ	1	1	1		1,000	1	5 00	15
104			*	0	no			no	no								13
546		546	0	0	no		8 00	yes	no	1					1	5 00	15
439			0	0	no		5 00	no	no	1							12
457		365	0	0	no		5 00	yes	no						1	5 00	13
468	0		0	0	no			no	no	2	1		4 00				14
546	80	546	0	0	no	1,000	550	yes	no	1					1	5 00	11
523		455	50	75	no	400	6 00	no	no						1	5 00	15
500	50	500	0	0	no			no	no		2						10
280			*	0	no			no	no				†				14
406			0	0	no			no	no						1	5 00	16
842		800	0	0	no	1,500		yes	no	1				3,000			18
573	0	562	0	0	no	1,000	700	no	no		2			2,000	1	5 00	14
173			*	0	no			no	no				*				14
437	0	437	0	0	no	700	800	yes	no						1	5 00	10
149			*	0	no			no	no				*				13

* Gives wages to parents and lives at home.

† Lives with parents.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Laborer.....				m	2	2	3	8	2	12		first work	\$1 40 d
Machine hand..				s			0	0	4	4		no work	3 50 w
Laborer.....				m	4	0	5	8	6	11	19	repairing	1 40 d
Elevator man..				m	7	0	3	10	10	11	19	"	1 25 d
Machine hand..				w'r	0	0	0	2	4	11	18	"	3 40 w
Carver.....				s			1	13	1	10	53	no work	3 30 d
".....				ny	1	0	4	11	3	11	26	sickness	13 00 w
".....				s			0	8	3	12		"	13 00 w
Machine hand..				id			0	8	4	12		"	1 00 d
Carver.....				s			0	10	2m	9	78	no work	3 30 "
Cabinet-maker..				s	0	0	1	23	22	11	26	"	12 00 w
".....				ny			2	10	9	11	26	"	10 50 "
".....				d			0	2	7m	11	19	"	1 50 d
".....				ny	4	0	3	44	3	10	53	"	3 00 "
".....				m	7	5	8	25	18	11	18	"	15 00 w
Carver.....				s			0	2	2	12		"	5 55 "
".....				m	4	3	5	21	2w	13		"	19 00 "
".....				s			0	2	2	13		"	5 55 "
".....				ny			0	2m	2m	2	104	no work	18 00 "
".....				s			0	6	2m	12		first work	3 00 "
".....				s			0	2	2	11	13	worked for self	19 50 w
Marker.....				d			0	2	2	12		"	1 00 d
Machine hand..				m	0	0	1	8	4	11	19	holidays	3 00 "
".....				d	1	0	2	4	7	12		"	1 70 "
".....				id	1	0	3	5	3	11	18	no work	1 75 d
Cabinet-maker..				ny			0	2	2	11	6	"	5 00 w
".....				d	2	0	3	12	3	10	52	"	12 00 "
".....				s			0	5	4	11	26	"	1 25 d
".....				m	2	2	3	24	14	11	26	"	2 25 "
Machine hand..				d			0	2	2	11	26	sickness	3 50 w
Lugger.....				m	0	0	1	7	7	11	6	repairing	1 40 d
Machine hand..				ny			0	8	2	10	52	no work	3 00 w
".....				s			0	2	2	6	155	"	3 00 w
Lugger.....				d	3	0	1	16	18	11	18	repairing	1 40 d
".....	40	"	"	m	4	3	5	1	1	11	18	not answered	1 40 "
Machine hand..	30	Canada	England	m	2	0	3	10	1	12		"	1 10 "
Cabinet-maker..	37	Sweden	Sweden	m	0	0	1	13	8	12		"	2 25 "
Carver.....	29	Illinois	Germany	s			0	12	8m	12		"	3 30 "
Cabinet-maker..	43	Germany	"	w'r	4	2	4	24	4	12		"	10 00 w
".....	32	"	"	m	3	0	4	3		9	75	no work	3 00 "
Carver.....	47	"	"	m	3	4	6	20		9	75	not answered	3 30 d
".....	25	Ireland	Ireland	s			0	7		5		first wrk in U.S.	3 00 "
".....	25	Norway	Norway	s			0	7		12		"	3 30 "
".....	23	Canada	Canada	s			0	6		12		"	3 00 "
Cabinet-maker..	47	Germany	Germany	m	3	0	4	23		10	53	no work	2 25 "
Machinist.....	37	Michigan	Holland	m	4	3	5	13		12		"	2 25 "
Cabinet-maker..	34	Ohio	Germany	m	0	0	3	16		10	52	no work	1 50 "
".....	35	"	Ireland	m	1	1	3	17		11	13	"	3 00 "
Carver.....	51	Penn.	Scotland	m	4	2	5	25		12		"	3 10 "
Cabinet-maker..	38	Germany	Germany	s			0	14		10	53	no work	1 50 "
Laborer.....	34	Holland	Holland	m	3	2	4	5		12		"	3 40 w
Cabinet-maker..	36	Norway	Norway	m	5	3	6	2		11	13	not answered	10 00 "
".....	34	Holland	Holland	m	6	4	7	15		12		"	12 50 "
".....	33	Sweden	Sweden	m	0	0	1	13		11	26	no work	2 00 d

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$437	---	\$236	\$120	0	\$700	\$300	---	yes	none	---	1	---	---	---	1	\$5 00	8
61	---	---	*	0	no	---	---	no	"	---	---	---	*	---	---	---	14
409	\$50	409	0	0	no	---	\$6 00	no	"	---	---	---	---	---	---	5 00	12
396	0	396	0	0	1,000	700	---	yes	"	---	1	---	---	---	---	5 00	29
419	0	419	0	0	no	---	---	no	"	---	---	---	\$3 50	---	---	5 00	12
858	10	---	0	0	---	---	---	"	"	---	1	---	5 00	---	1	5 00	14
858	10	475	100	100	1,500	1,300	---	yes	"	---	1	---	---	1,000	2	10 00	18
936	100	---	160	100	no	---	---	no	"	---	---	---	4 00	2,000	2	10 00	15
312	---	---	50	100	"	---	---	no	banjo	---	---	---	2 50	---	---	10	10
772	0	---	---	0	---	---	---	"	none	---	---	---	5 00	---	3	15 00	15
572	150	400	0	0	2,000	---	---	yes	"	---	1	---	---	---	---	---	14
500	---	---	0	0	no	---	---	no	"	---	---	---	---	---	1	5 00	13
438	0	---	0	0	"	---	---	"	"	---	---	---	3 50	---	---	---	14
630	15	400	75	0	2,150	---	---	yes	"	---	2	---	---	---	1	5 00	15
747	30	600	150	800	2,000	---	---	"	piano	---	1	3	---	3,000	2	10 00	14
304	---	---	*	0	no	---	---	no	none	---	---	---	*	---	---	---	15
1,138	50	500	0	0	"	---	10 00	yes	"	---	2	1	---	---	---	---	23
304	---	---	0	0	"	---	---	no	piano	---	---	---	4 00	---	---	---	15
624	4	---	0	0	"	---	---	"	none	---	1	---	5 00	---	3	15 00	15
26	0	---	*	0	"	---	---	"	"	---	---	---	*	---	---	---	12
936	---	---	0	0	"	---	---	"	"	---	2	---	10 00	---	---	---	16
972	---	---	300	0	"	---	---	"	"	---	---	---	4 00	---	2	10 00	14
312	---	---	0	0	"	---	---	"	"	---	1	---	*	---	---	---	14
877	---	400	0	0	"	---	12 00	yes	"	---	1	---	---	---	1	5 00	16
530	---	530	0	0	"	---	7 00	"	"	---	---	---	---	---	---	---	14
523	0	365	150	50	"	---	5 00	no	"	---	1	---	---	---	1	5 00	14
554	---	*	0	0	"	---	---	"	"	---	---	1	*	---	---	---	14
520	---	520	0	30	"	---	8 00	yes	"	---	---	---	---	---	2	15 00	14
357	---	---	0	0	"	---	---	no	"	---	---	---	3 50	---	---	---	13
643	0	363	150	0	1,000	---	---	yes	"	---	1	2	---	---	2	10 00	10
167	---	*	0	0	no	---	---	no	"	---	---	---	*	---	---	---	13
423	0	427	0	0	1,500	700	---	yes	"	---	1	---	---	---	1	5 00	9
130	---	*	0	0	no	---	---	no	"	---	---	---	*	---	---	---	12
78	---	*	0	0	"	---	---	"	"	---	---	---	*	---	---	---	14
419	0	419	0	0	"	---	6 00	"	"	---	---	---	---	---	1	5 00	7
419	---	419	0	0	600	---	---	"	"	---	1	---	---	---	---	---	12
343	---	312	0	0	no	---	10 00	"	"	---	---	---	---	---	---	---	10
702	0	702	0	0	"	---	7 00	yes	"	---	1	2	---	---	1	5 00	18
1,080	---	---	0	0	"	---	---	no	"	---	1	---	5 00	---	---	---	17
520	---	442	0	0	900	---	---	yes	"	---	---	2	---	1,000	1	5 00	14
312	0	500	0	0	600	---	---	"	"	---	2	---	---	1,000	1	5 00	16
772	0	772	0	0	no	---	10 00	"	"	---	1	2	4 00	---	---	---	14
390	---	---	0	0	"	---	---	no	"	---	---	---	5 00	---	2	10 00	17
1,030	---	---	0	0	"	---	---	"	"	---	1	2	5 00	---	1	5 00	15
936	---	---	0	0	"	---	---	"	"	---	---	---	---	---	---	---	15
715	---	715	0	0	2,200	500	---	yes	"	---	1	---	---	---	3	5 00	13
702	---	412	0	0	900	200	---	"	"	---	1	1	---	---	1	9 00	13
390	---	416	0	0	no	---	7 00	"	"	---	---	---	---	---	---	---	9
598	---	416	0	0	1,200	200	---	"	"	---	1	2	---	---	1	5 00	18
967	---	967	0	0	no	---	10 00	"	"	---	---	---	---	2,000	1	10 00	16
390	0	---	0	0	"	---	---	no	"	---	8	---	4 50	400	2	11 00	14
437	0	437	0	0	600	500	---	"	"	---	---	---	---	---	1	5 00	13
498	0	290	0	0	no	---	---	"	"	---	---	---	3 25	---	---	---	15
655	8	520	0	0	2,000	1,000	---	yes	organ	---	1	---	---	---	1	5 00	10
572	0	464	0	0	no	---	7 00	"	none	---	---	1	---	---	1	5 00	14

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.
Cabinet-maker..	26	Sweden...	Sweden...	M
Engineer.....	33	Penn.....	U. S.....	M
Cabinet-maker..	34	Sweden...	Sweden...	s
Lugger.....	19	Germany..	Germany..	s
Machine hand..	18	Michigan..	"	s
" ".....	20	Scotland..	Scotland..	s
Cabinet-maker..	43	Germany..	Germany..	M
".....	25	England..	England..	s
".....	40	Germany..	Germany..	M
Carver.....	42	"	"	w
Finisher.....	50	Penn.....	U. S.....	M
Stock-keeper...	44	Holland..	Holland..	M
Trimmer.....	25	Illinois...	"	s
Finisher.....	17	Holland..	"	s
Sander.....	16	"	"	s
Sand-paperyer...				s
Varnisher.....				s
Finisher.....				s
Rubber.....			nd...	M
Elevator man...			ay...	M
Cabinet-maker.			any.	M
Rubber.....			nd...	M
Stock-keeper...				M
Varnisher.....			nd...	s
Cabinet-maker.			any.	M
Foreman.....				s
Cabinet-maker.				M
Laborer.....			nd...	M
Mill-wright.....				M
Glass-inspector.			s	M
Packer.....			nd...	s
Cabinet-trimmer			ay...	M
Packer.....				M
Laborer.....			nd...	M
Finisher.....				M
Filler.....				s
".....				M
".....			nd...	s
Laborer.....			nd...	s
Carver.....			id...	s
Cabinet-maker.			any.	s
".....			nd...	M
".....			nd...	s
Sander.....				s
Teamster.....				M
Packer.....				s
Carver.....			any.	s

TABLE NO. 1.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.	
\$390		\$290	0	0	no		\$7 00	yes	none	1			1	\$5 00	14	
326		800	0	0	"		10 00	"	piano	1		\$2,500	1	12 50	8	
227	0		0	0	"			no	none			\$3 50			18	
173			0	0	"			"	"			\$3 00			18	
61			0	0	"			"	"			0 00			18	
351			0	0	"			"	"		3 00		1	5 00	15	
580	0	580	0	0	\$900			yes	"	1		2,000	1	5 00	14	
702			0	0	no			no	"	1	4 50				14	
780		512	0	0	2,000	\$200		yes	"	1	4 50	2,000	1	5 00	14	
747	0		0	0	no			no	"	1	4 50				14	
416		364	0	0	"		5 00	yes	"				1	5 00	16	
437	0	416	0	0	800	400		"	"	2			1	5 00	14	
406			0	0	no			no	"		1	5 00			10	
191			*	0	"			"	"		*				12	
87			*	0	"			"	"		*				12	
106			*	0	"			"	"						12	
357			0	0	"			"	"		4 00		1	5 00	15	
546			0	0	"			"	"	2	4 00		1	5 00	13	
437		437	0	0	800	400		yes	organ	2			1	5 00	12	
416	0	312	0	0	1,200			"	none				1	5 00	15	
672		450	0	0	825	200		"	"	1		1,500	1	4 00	13	
419	0	419	0	0	600			"	"	1			2	10 00	14	
468		468	0	0	1,600	800		no	piano					1	5 00	14
269			0	0	no			"	none	1	3 50				15	
694	0	624	0	0	1,300	300		"	"			600	1	5 00	14	
580			0	0	no			"	"	1	4 00	1,000	2	10 00	16	
541		364	0	0	"		7 00	yes	"	2		1,000	1	5 00	15	
390		390	0	0	600			no	"						10	
702		702	0	0	no		16 00	yes	piano	1		2,500	1	5 00	14	
546		500	0	0	2,000			"	"	1			1	5 00	18	
312			0	0	no			no	none	1	4 00		2	10 00	14	
530	0	450	0	0	"			yes	"	1			1	5 00	17	
546		546	0	0	"			"	"	1				1	5 00	17
587		280	0	0	"		4 75	no	"						12	
806		416	0	0	"		6 00	yes	"						15	
347		347	0	0	500			no	"	1					14	
303		304	0	0	800	400		yes	"	1			1	5 00	13	
324	0		0	0	no			no	"		3 50		1	5 00	12	
390			0	0	"			"	"		5 00		1	10 00	16	
1,080			0	0	"			"	"	2			1			
572			0	0	"			"	"	1	5 00		1	5 00	16	
1,643		928	\$715	0	"		15 00	yes	piano	1		2,000	1	5 00	16	
477	0		0	0	"			no	"	1	3 50				10	
360			0	0	"			"	"	1	4 00				17	
173			0	0	"			"	"	1	3 00				15	
546		546	0	0	"		12 00	yes	organ	1	2	1	2	14 00	12	
468			0	0	"			no	none	2	3 75	1,000	1	5 00	12	
780			0	0	"			"	"	1	4 00	2,000	2	14 00	15	

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. E.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$520	0	\$450	0	0	\$800	\$800	no	no	none	Daily papers.	Weekly papers.	Magazines.					9
299	0	498	0	0	no			no	"		1		\$3 50		1	\$3 50	14
498	0	498	0	0	1,200	500	yes	"	"	1	1		4 50	\$800	1	8 00	13
498	0	498	0	0	1,200	500	yes	"	"								11
273	0	300	0	0	3,000			"	"								14
390		889		0	no			no	"				3 50				14
76			*	0				no	"								15
374		374	0	0	"		5 00	yes	"				*	350	1	3 50	13
196				0	"			no	"								15
448	0	448	0	0	400			"	"					150	2	9 00	12
156	0		0	0	no			"	"				3 50				14
52			*	0				"	"								15
299			0	0	"			"	"				5 00	150	1	3 50	18
399			0	0	"			"	"				4 00				14
3			*	0	"			"	"				*				18
448			0	0	"			"	"				3 00	150	1	8 00	21
156	0		0	0	"			"	"				3 50				16
208			0	0	"			"	"				*	150	1	3 50	15
409		409	0	0	"		6 00	yes	"		1				2	12 00	10
199			*	0	"			no	"				*				17
458			*	0	"			"	"	1	1		*		1	3 50	15
173			*	0	"			"	"				*				14
478		370	0	0	"		6 00	yes	"	1							21
512				0	"			no	"				4 50	350	2	10 00	17
199			*	0	"			"	"				*				15
384			0	0	"			"	"				3 50				16
366			0	0	"			"	"				†				15
416			*	0	"			"	"				3 50				13
458	\$276			0	"			"	"	1			3 00		2	15 00	14
382			*	0	"			"	"				*				12
585		200	0	0	"		7 00	yes	organ	1	1		2,800		1	6 00	25
202			0	0	"			no	none				3 25		1	3 50	14
9			*	0	"			"	"				*				14
11				0	"			"	"				*				14
217			*	0	"			"	"				*				11
448		365	0	0	1,900			"	"		1				2	5 35	22
429			0	\$75	400			"	"				4 00		1	6 00	11
260			\$50	0	no			"	"				2 50				9
238			*	0	"			"	"				*				18
448		448	0	0	"		6 00	yes	"	1		1		365	1	3 50	17
986	300	986	0	0	1,800			"	"		1				1	6 00	16
273		273	0	0	600			no	"						1	6 00	12
195			0	0	no			"	"				3 50		1	3 00	14
104			0	0	"			"	"				2 00				17
747		747	0	0	1,200	400		yes	"	1	1	1		3,350	1	5 00	18
760			*	0	no			no	"				*				14
179			*	0	"			"	"				*				14
572			*	0	"			"	"				*		1	8 00	12
364			*	0	"			"	"				*				12
468	0	268	200	200	"		5 00	"	"		law				1	6 00	12
349			*	0	"			"	"				*				9
520			0	0	"			"	"				3 50				12
546	0	496	50	0	400	375		"	"					500			7
523	0		0	0	no			"	"				4 50		1	5 00	10

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
2468	-----	-----	0	0	no	-----	-----	no	none	-----	-----	-----	\$3 00	-----	1	\$6 60	13
858	-----	\$358	0	0	"	-----	\$10 00	yes	"	1	-----	-----	-----	\$4,500	1	5 00	14
448	-----	448	0	0	"	-----	7 00	no	"	-----	-----	-----	4 00	-----	1	6 00	14
349	-----	-----	0	0	"	-----	-----	"	"	-----	-----	-----	-----	-----	1	3 50	12
380	\$10	-----	\$50	0	\$1,050	\$800	-----	"	"	1aw	-----	-----	-----	-----	-----	-----	-----
282	-----	-----	*	0	no	-----	5 00	"	"	-----	-----	-----	*	-----	-----	-----	14
448	-----	425	0	0	"	-----	-----	"	"	-----	-----	-----	*	-----	1	5 00	18
380	-----	-----	*	0	"	-----	-----	"	"	1	-----	-----	-----	-----	-----	-----	18
774	0	800	0	0	850	300	-----	yes	"	1	-----	-----	-----	-----	-----	-----	14
588	0	-----	0	0	no	-----	-----	no	"	1	-----	-----	8 50	-----	-----	-----	14
299	-----	-----	*	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	15
5	-----	-----	-----	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	15
407	0	-----	50	\$50	"	-----	-----	"	"	1	-----	-----	8 50	-----	-----	-----	20
429	-----	-----	95	0	"	-----	-----	"	"	2	-----	-----	4 00	-----	-----	-----	14
104	-----	-----	-----	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	14
438	0	-----	*	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	14
318	-----	-----	50	50	"	-----	-----	"	"	-----	-----	-----	2 00	-----	-----	-----	14
406	-----	-----	0	0	"	-----	-----	"	"	-----	-----	-----	4 00	-----	-----	-----	15
219	-----	-----	*	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	12
380	-----	300	75	0	900	500	-----	yes	"	-----	-----	-----	-----	-----	1	5 00	13
299	-----	-----	*	0	no	-----	-----	no	"	-----	-----	-----	*	-----	-----	-----	12
300	-----	-----	0	0	"	-----	-----	"	"	3	-----	-----	*	-----	-----	-----	11
385	-----	-----	0	0	"	-----	-----	"	"	-----	-----	-----	4 00	-----	1	5 00	14
349	-----	-----	-----	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	14
284	-----	-----	-----	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	13
199	-----	-----	*	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	14
219	-----	-----	-----	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	14
195	-----	-----	*	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	14
922	0	800	0	0	"	-----	11 00	yes	"	1	1	1	*	-----	1	5 00	14
374	-----	-----	*	0	"	-----	-----	no	"	-----	-----	-----	*	-----	-----	-----	16
293	-----	-----	0	0	"	-----	-----	"	"	-----	-----	-----	8 50	-----	1	5 00	12
273	-----	-----	*	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	18
313	0	-----	0	0	"	-----	-----	"	"	-----	-----	-----	8 50	-----	-----	-----	15
349	-----	-----	*	0	"	-----	-----	"	accord'n	-----	-----	-----	*	-----	-----	-----	12
191	-----	-----	-----	0	"	-----	-----	"	none	-----	-----	-----	*	-----	-----	-----	13
468	-----	-----	175	175	"	-----	-----	"	"	-----	-----	-----	8 50	-----	-----	-----	17
624	-----	500	0	0	1,800	1,100	-----	yes	organ	1	-----	-----	-----	1,000	2	11 00	14
386	-----	-----	0	0	no	-----	-----	no	none	-----	-----	-----	+	-----	-----	-----	17
416	-----	-----	100	250	"	-----	-----	"	"	-----	-----	-----	+	-----	-----	-----	14
224	-----	-----	25	0	"	-----	-----	"	"	-----	-----	-----	+	-----	-----	-----	14
195	-----	-----	*	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	12
262	-----	-----	*	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	14
227	-----	-----	0	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	18
747	-----	630	150	300	1,500	-----	-----	yes	"	1	-----	-----	-----	1,000	-----	5 00	14
244	-----	-----	*	0	no	-----	-----	no	"	-----	-----	-----	*	-----	-----	-----	14
487	-----	-----	100	0	"	-----	-----	"	"	-----	-----	-----	8 50	-----	-----	-----	15
487	-----	-----	0	0	"	-----	-----	"	"	-----	-----	-----	-----	800	1	5 00	12
496	800	498	0	0	"	-----	10 00	yes	"	-----	-----	-----	1 00	-----	1	5 00	21
249	-----	-----	100	22	"	-----	-----	no	"	-----	-----	-----	-----	-----	1	5 00	14
585	-----	400	250	0	3,400	-----	-----	yes	piano	1	-----	-----	-----	-----	1	5 00	9
448	-----	-----	*	0	no	-----	-----	no	none	-----	-----	-----	*	-----	-----	-----	10
299	-----	-----	0	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	15
429	-----	-----	0	0	"	-----	-----	"	"	-----	-----	-----	4 50	-----	1	5 00	15
282	-----	-----	0	0	"	-----	-----	"	"	-----	-----	-----	-----	-----	-----	-----	15
487	-----	800	0	0	4,000	1,100	-----	yes	"	-----	1	2	-----	800	1	5 00	6

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Wood turner.....	34	Canada.....	Ireland.....	1	4	8	11½	19	shut down	\$12 00 w
			ny	0	4	4m	12	18	repairing	1 00 d
			nd.	0	1	1	11½	18		75 "
			d.	0	4	½	12			4 00 w
			ny	1	6	1	11	26	no work	10 00 "
			l...	0	½	½	12			2 50 "
			d.	0	7	7	11½	19	no work	8 00 "
			ny	0	1	1	11½	19	shut down	4 50 "
			nd.	8	12	12	11½	18	"	9 00 "
				1	4	4	11½		"	15 00 "
			....	0	2	2	11½		"	6 00 "
			nd.	0	½	½	11½	18	"	5 00 "
			ny	0	2w	2w	½		first work	4 00 "
				0	2	2	10	62	no work	4 60 "
			....	0	2	2	11½	18	"	4 00 "
			....	0	6w	6w	1½		first work	4 00 "
			ny	0	8	8	10	53	no work	4 00 "
			d.	0	1½	1½	10	58	"	4 00 "
				0	½	½	10	52	"	5 00 "
			nd.	0	1½	1½	11	26	"	4 00 "
			....	0	6w	6w	1½		first work	4 00 "
			ny	0	3	3	11½	18	no work	6 00 "
			nd.	0	9	9	11	26	"	7 00 "
			ny	0	7	7	11½	19	sickness	6 00 "
			ny	0	9½	9½	11	26	no work	7 00 "
			a...	0	10	10	11	26	not answered	7 00 "
			ny	0	3	3	11½		no work	6 00 "
			ny	0	5	5	12			7 00 "
			ny	0	2	2	12			6 00 "
				0	4½	4½	12			4 00 "
			nd.	0	1	1	11½	19	no work	6 00 "
			....	0	4	4	6	156	sickness	11 00 "
			nd.	1	5	5	11½	18	no work	18 00 "
			nd.	0	2½	2	11½	18	not answered	12 50 "
			nd.	0	1	1	11½	19	no work	6 00 "
GRAND RAPIDS CHAIR CO.										
Rubber.....		Sweden.....	Sweden.....	3	15	3	11½	19	"	11 00 "
Stockman.....		Holland ..	Holland ..	4	1½	1½	11	26	"	8 00 "
Packer.....	20	"	"	0	3	3	11	26	"	9 50 "
".....	18	U. S.....	U. S.....	0	2	2	12			1 00 d
Filler.....	38	Holland.....	Holland.....	2	1½	5w	11½	18	no work	1 25 "
Machine-hand.....	18	U. S.....	France.....	0	3	4½	11½	18	"	5 50 w
Filler.....	35	Sweden.....	Sweden.....	3	1	1	12			1 25 d
Varnisher.....	22	U. S.....	Holland ..	3	7	6	12			1 75 "
Sand-paperer.....	17	Holland.....	"	0	1	1	12			4 40 w
Cabinet-maker.....	28	Michigan.....	"	2	5	2	10	52	no work	9 00 "
Filler.....	56	Holland.....	"	2	7	6	12			1 25 d
Polisher.....	58	"	"	3	4	4	11	26	sickness	6 00 w
Rubber.....	32	"	"	2	10	½				1 75 d
Cabinet-maker.....	22	Sweden.....	Sweden.....	0	1	1	9	78	no work	6 00 w
".....	23	"	"	0	8	7m	7		not in U. S.	1 00 d

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. E.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
Daily papers.	Weekly papers.	Magazines.															
3655	-----	\$300	\$250	0	no	-----	-----	yes	none	1	-----	-----	-----	\$300	1	\$5 00	15
468	-----	350	150	0	-----	-----	\$6 00	no	-----	-----	-----	-----	-----	-----	-----	-----	14
224	-----	-----	0	0	-----	-----	-----	no	-----	-----	-----	-----	\$4 00	-----	1	5 00	15
206	-----	-----	*	0	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	5 00	12
477	-----	-----	150	\$300	-----	-----	-----	-----	-----	3	-----	-----	5 00	300	1	5 00	12
182	-----	-----	*	0	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	14
300	0	-----	0	0	-----	-----	-----	-----	-----	-----	1	-----	5 00	-----	1	5 00	12
219	-----	-----	*	0	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	15
448	-----	448	0	0	-----	-----	16 00	yes	piano	1	1	1	-----	-----	1	5 00	14
747	-----	500	200	400	-----	-----	12 00	-----	-----	-----	-----	-----	-----	-----	-----	-----	14
244	-----	-----	75	75	-----	-----	-----	-----	none	-----	-----	-----	2 00	150	1	3 50	18
249	-----	-----	0	0	-----	-----	-----	no	-----	-----	-----	-----	2 50	-----	-----	-----	16
9	0	-----	*	0	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	20
173	-----	-----	50	0	-----	-----	-----	yes	-----	-----	-----	-----	+	-----	-----	-----	16
199	-----	-----	25	0	-----	-----	-----	-----	-----	-----	-----	-----	3 00	-----	-----	-----	16
26	-----	-----	*	0	-----	-----	-----	no	-----	-----	-----	-----	*	-----	-----	-----	17
173	-----	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	12
173	-----	-----	*	0	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	14
217	-----	-----	*	0	-----	-----	-----	yes	-----	-----	-----	-----	*	-----	1	3 50	13
190	-----	-----	*	0	-----	-----	-----	no	-----	-----	-----	-----	*	-----	-----	-----	14
26	-----	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	+	-----	-----	-----	16
249	-----	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	+	-----	-----	-----	23
384	0	-----	100	0	-----	-----	-----	-----	-----	-----	-----	-----	2 00	-----	-----	-----	13
244	-----	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	+	-----	-----	-----	13
384	-----	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	+	-----	-----	-----	17
384	-----	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	+	-----	-----	-----	19
249	-----	-----	*	0	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	18
384	-----	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	3 00	-----	-----	-----	15
312	-----	-----	*	0	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	18
208	-----	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	2 50	-----	-----	-----	14
292	-----	-----	52	0	-----	-----	-----	-----	-----	-----	-----	-----	+	-----	-----	-----	17
286	-----	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	refuse	-----	-----	-----	22
648	-----	648	0	0	-----	-----	12 00	yes	piano	-----	-----	-----	1	-----	-----	-----	18
623	-----	-----	0	0	-----	-----	-----	no	none	-----	-----	-----	5 00	-----	-----	-----	18
390	-----	-----	100	0	-----	-----	-----	-----	-----	-----	-----	-----	3 50	-----	-----	-----	20
536	\$100	500	0	0	-----	-----	7 00	yes	-----	1	-----	-----	-----	-----	-----	-----	13
381	0	350	0	0	-----	-----	6 00	no	-----	-----	-----	-----	-----	-----	1	5 00	15
453	-----	-----	0	0	-----	-----	-----	-----	-----	-----	1	-----	-----	-----	-----	-----	16
312	-----	-----	25	25	-----	-----	-----	-----	-----	-----	2	-----	2 50	-----	-----	-----	16
374	0	374	0	0	-----	-----	4 00	-----	-----	-----	-----	-----	3 50	-----	-----	-----	13
274	-----	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	13
390	0	350	0	0	-----	-----	8 00	yes	-----	1	2	-----	2 50	-----	1	5 00	13
546	-----	500	0	0	-----	-----	4 00	-----	-----	-----	1	-----	-----	-----	-----	-----	14
229	0	-----	*	0	-----	-----	-----	no	-----	-----	-----	-----	*	-----	-----	-----	14
390	-----	390	0	0	\$1,000	\$900	-----	-----	-----	-----	1	-----	-----	-----	-----	-----	13
390	50	350	0	0	no	-----	6 00	-----	-----	-----	-----	-----	-----	-----	1	5 00	18
381	0	350	0	0	500	-----	-----	yes	-----	-----	1	-----	-----	-----	1	5 00	12
546	-----	450	0	0	1,500	200	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	13
312	75	-----	0	0	no	-----	-----	no	-----	-----	-----	-----	4 00	-----	1	5 00	14
182	0	-----	0	0	-----	-----	-----	-----	-----	-----	-----	-----	3 50	-----	-----	-----	15

* Gives wages to parents and lives at home.

+ Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.
Cabinet-maker..	35	Denmark..	Denmark..	m	4
"	35	"	"	m	4
"	50	England..	England..	m	4
Filler.....	57	Holland..	Holland..	m	1
Cabinet-maker..	38	Sweden..	Sweden..	s	1
Sand-paperer....	17	Holland..	Holland..	s	1
"	19	"	"	s	1
Varnisher.....	23	England..	England..	s	1
Cabinet-maker..	46	Denmark..	Denmark..	m	1
Filler.....	32	Sweden..	Sweden..	s	1
Packer.....	18	U. S.....	Ireland..	s	1
Varnisher.....	30	Holland..	Holland..	m	1
Rubber.....	36	Austria..	Austria..	m	1
Filler.....	29	Sweden..	Sweden..	s	1
Rubber.....	34	Holland..	Holland..	m	1
Polisher.....	28	"	"	m	1
Cabinet-maker..	20	Germany..	Germany..	s	1
Stock man.....	32	Holland..	Holland..	m	1
Rubber.....	22	"	"	s	1
Polisher.....	39	Prussia..	Poland..	m	1
Cabinet-maker..	42	U. S.....	U. S.....	m	1
Finisher.....	34	Holland..	Holland..	s	1
"	24	Michigan..	U. S.....	m	1
"	26	Holland..	Holland..	m	1
Trimmer.....	26	Michigan..	U. S.....	m	1
Chair maker....	29	Holland..	Holland..	m	1
Finisher.....	40	"	"	m	1
Packer.....	18	Canada..	Canada..	s	1
Trimmer.....	31	Sweden..	Sweden..	s	1
Packer.....	15	Holland..	Holland..	s	1
Cabinet-maker..	47	Germany..	Germany..	m	1
"	24	Sweden..	Sweden..	m	1
Finisher.....	23	Holland..	Holland..	s	1
"	31	Austria..	Austria..	s	1
"	15	Michigan..	Holland..	s	1
"	25	New York..	U. S.....	m	1
Filler.....	33	Holland..	Holland..	m	1
"	17	"	"	s	1
Finisher.....	34	Sweden..	Sweden..	s	1
"	22	Indiana..	U. S.....	s	1
"	27	Holland..	Holland..	m	1
"	19	"	"	s	1
Trimmer.....	35	Denmark..	Sweden..	m	1
Machine hand..	21	Holland..	Holland..	s	1
Cabinet-maker..	29	Germany..	Germany..	m	1
Overseer.....	34	Canada..	Canada..	s	1
Cabinet-maker..	27	Germany..	Germany..	m	1
Filler.....	40	Norway..	Norway..	s	1
Lagger.....	36	Holland..	Holland..	m	1
Cabinet-maker..	31	Denmark..	Denmark..	m	1
"	26	Germany..	Germany..	s	1
Finisher.....	32	Austria..	Austria..	m	1
Cabinet-maker..	26	Germany..	Poland..	m	1
Foreman.....	36	Denmark..	Denmark..	m	1
Finisher.....	28	"	Sweden..	s	1

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, in value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
2500	0	3400	\$198	0	\$ 1,400	950	...	yes	none	1	1	...	...	...	14
273	0	350	0	0	no	...	...	no	...	...	...	...	...	...	14
423	0	350	175	0	350	...	...	yes	...	...	...	...	...	...	14
280	0	...	0	0	no	...	35 00	yes	...	...	...	...	...	...	14
286	0	...	0	0	no	...	...	no	...	...	...	...	...	...	14
280	...	...	0	0	no	...	...	no	...	...	...	...	...	...	11
288	...	...	0	0	no	...	...	no	...	...	...	...	...	...	12
573	...	...	0	0	no	...	...	no	...	...	...	...	...	...	16
588	0	800	0	0	500	...	...	no	...	...	...	...	...	5 00	12
282	0	...	0	0	no	...	...	no	...	...	...	...	...	...	12
468	...	...	75	...	...	...	...	no	...	...	...	...	...	...	12
500	...	400	100	0	1,500	700	...	yes	...	...	...	...	...	5 00	12
408	0	498	0	0	800	400	...	no	...	...	...	...	...	5 00	12
380	0	...	0	0	no	...	...	no	...	...	...	...	...	...	12
512	0	450	50	0	480	400	...	yes	...	...	...	...	...	5 00	12
251	0	250	50	0	no	...	5 50	no	...	...	...	...	...	5 00	14
457	0	...	0	0	no	...	...	no	...	...	...	...	...	...	12
380	0	350	0	0	no	...	5 00	no	...	...	...	...	...	...	12
380	0	...	0	0	no	...	...	no	...	...	...	...	...	...	14
448	0	250	40	0	600	400	...	no	...	...	...	...	...	...	12
508	...	500	50	0	1,100	700	...	yes	...	...	...	...	...	5 00	16
280	0	...	0	0	no	...	...	no	...	...	...	...	...	...	12
500	...	500	0	0	no	...	6 00	no	...	...	...	...	...	5 00	16
251	...	251	0	0	480	...	...	yes	...	...	...	...	...	5 00	16
500	...	500	0	0	no	...	8 00	no	...	...	...	...	...	5 00	22
428	...	818	0	0	750	275	...	yes	...	...	...	...	...	5 00	11
280	\$108	870	0	0	500	250	...	no	...	...	...	...	...	5 00	12
285	...	...	0	0	no	...	...	no	...	...	...	...	...	...	12
428	0	...	0	0	no	...	...	no	...	...	...	...	...	...	12
65	...	...	0	0	no	...	...	no	...	...	...	...	...	...	12
487	200	487	0	0	480	250	...	yes	...	...	...	...	...	5 00	14
308	0	268	0	0	no	...	...	no	...	...	...	...	...	...	11
288	...	...	0	0	no	...	...	no	...	...	...	...	...	...	14
500	...	...	0	0	no	...	...	no	...	...	...	...	...	...	14
282	...	...	0	0	no	...	...	no	...	...	...	...	...	...	10
624	...	624	0	0	no	...	6 00	yes	...	...	...	...	...	...	16
222	0	222	0	0	no	...	4 00	no	...	...	...	...	...	...	14
420	...	...	0	0	no	...	6 00	no	...	...	...	...	...	...	10
380	200	...	0	0	no	...	...	no	...	...	...	...	...	...	14
573	...	...	0	0	no	...	...	no	...	...	...	...	...	...	14
572	0	572	0	0	900	600	...	no	...	...	...	...	...	...	14
288	...	...	0	0	no	...	...	no	...	...	...	...	...	...	14
308	121	308	0	0	650	...	...	yes	...	...	...	...	...	5 00	14
280	...	...	0	0	no	...	...	no	...	...	...	...	...	...	14
420	50	420	0	0	no	...	6 00	yes	...	...	...	...	...	5 00	14
387	...	...	125	300	no	...	...	no	...	...	...	...	...	...	21
420	...	420	0	0	625	520	...	yes	...	...	...	...	...	5 00	15
468	35	...	0	0	no	...	...	no	...	...	...	...	...	...	15
458	...	458	0	0	400	250	...	yes	...	...	...	...	...	...	14
455	0	455	0	0	no	...	5 50	no	...	...	...	...	...	5 00	12
420	...	...	0	0	no	...	...	no	...	...	...	...	...	...	15
448	0	448	0	0	600	350	...	yes	...	...	...	...	...	5 00	12
573	125	573	0	0	no	...	6 00	no	...	...	...	...	...	...	15
780	76	780	0	0	500	...	...	no	...	...	...	...	...	5 00	14
278	875	...	0	0	no	...	...	no	...	...	...	...	...	10 00	14

* Gives wages to parents and lives at home. † Lives with parents and pays no stated amount.

TABLE No 1.—CONTINUED.—Showing Individual Reports.

Occup	Sex and age.	position.	No. of years with present em- ployer.	No. of months employed dur- ing the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Cabinet- Finisher.	m 4m		10	10	52	no work	\$1 75 d
"	m 10		10	10	52	"	1 50 "
"	m 12		12	12	52	"	1 25 "
"	m 9		9	9	78	no work	1 75 "
"	m 11		11	11	26	"	1 75 "
"	m 11		11	11	26	"	1 75 "
"	m 11		11	11	26	"	4 75 "
Chair-m Finisher	m 10		11	11	7	shop closed	2 00 "
Sander.	m 10		10	10	52	no work	1 50 "
"	m 11		11	11	7	sickness	5 10 w
Filler...	m 6		11	11	19	no work	10 00 "
Finisher	m 8m		8	8	---	first work	6 00 "
"	m 8m		11	11	7	shop closed	1 00 d
"	m 11		11	11	26	not answered	1 75 "
"	m 12		12	12	---	"	10 50 w
"	m 12		12	12	---	"	8 00 "
"	m 12		12	12	---	"	10 00 "
"	m 7		8	8	---	first wrk in U.S.	7 00 "
"	m 11		11	11	26	vacation	1 75 d
"	m 11		11	11	19	no work	1 50 "
"	m 5		9	9	59	"	1 50 "
Chair-m Carver...	m 8		12	12	---	"	1 25 "
Packer..	m 11		11	11	26	vacation	10 00 w
"	m 11		11	11	12	no work	8 00 "
"	m 11		10	10	39	"	1 37 1/2 d
"	m 11		11	11	26	"	1 25 "
Cabinet- Carver	m 11		11	11	26	"	3 00 "
"	m 11		11	11	6	no work	2 75 "
"	m 11		11	11	19	"	2 50 "
"	m 11		11	11	---	"	2 75 "
Marker...	m 4m		11	11	7	"	2 75 "
Carver...	m 11		12	12	---	"	3 50 w
"	m 11		11	11	19	no work	3 50 d
"	m 12		12	12	---	"	3 50 "
"	m 11		11	11	19	no work	4 00 "
Cabinet-	m 8		11	11	19	"	1 50 "
"	m 10		10	10	39	"	1 75 "
"	m 12		12	12	---	"	2 00 "
"	m 10m		10	10	---	not in U. S.	1 65 "
"	m 11		11	11	26	no work	1 75 "
"	m 4m		4	4	---	first wrk in U.S.	1 00 "
"	m 10		10	10	39	no work	2 00 "
"	m 11		11	11	7	sickness	5 00 w
Machine (cabinet-	m 10		11	11	12	no work	1 50 d
Carver...	m 11		11	11	26	"	1 75 "
"	m 1w		1	1	---	first work	1 80 w
"	m 11		11	11	26	no work	4 00 "
"	m 11		11	11	26	"	3 00 "
"	m 1w		1	1	---	first work	1 80 "
"	m 7		11	11	26	no work	3 00 "
"	m 11		11	11	19	"	2 00 "
"	m 11		11	11	26	"	3 00 "
"	m 11		11	11	26	"	3 00 "
"	m 1		6	6	156	laid off	3 00 "
"	m 11		11	11	26	no work	3 00 "

TABLE No. 1—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, ill value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of papers at arrival.	Daily papers.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
2455			00	00	no			no	none			\$3 50	2	\$10 00	14
380			00	00	no			no	no			3 50		5 00	13
400	380	380	00	00	no		36 00	yes	no			3 50		5 00	15
500			00	00	no			no	no			6 00		5 00	17
500	26	3500	00	00	2000	3000		no	no	1	1			10 00	14
500	75	500	00	00	400			no	no	1	1			5 00	13
611	0	580	361	\$1,000	2,000			yes	no	1	1			5 00	13
800	0	800	30	00	600	800		no	no			2 00		10 00	13
800			00	00	no			no	no						12
587	100	500	00	00	no		7 00	yes	no	1	1				9
208			00	00	no			no	no						13
306			00	00	no			no	no						13
500	125	385	00	00	1,000	200		yes	no		1				13
545			00	00	no			no	no						12
812			00	00	no			no	no						10
580			00	00	no			no	no			3 25			13
338	0		00	00	no			no	no			3 50			13
500	0		00	00	no			no	no			4 00			13
480	100		150	150	no			no	no			3 50	2	10 00	15
380		380	00	00	700	500		no	no		1			5 00	10
540	0	350	50	00	1,000			no	no		2			5 00	11
477			00	00	no			no	no			4 00	1	5 00	17
399			00	00	no			no	no						13
375			00	00	no			no	no			3 50	1	5 00	13
357			00	00	no			no	no						13
573	75	300	25	00	no		7 00	no	no		1			10 00	14
358	0		10	00	no			no	no		1	7 00			14
1,080	20	1,080	00	00	no		6 00	no	no		1	\$2,000	1	5 00	13
823	100		00	00	no			no	no		1	4 00			14
540		700	140	00	no		8 00	yes	no	1			1	5 00	10
153			00	00	no			no	no						14
955		723	00	00	no		8 00	yes	no	1	1		2	10 00	13
1,082	0		refuse	refuse	no			no	no			4 00	1	5 00	20
1,170	80	800	150	00	1,100	900		yes	organ	1	1	3,300	1	5 00	14
430	0		00	00	no			no	none						16
478		423	50	00	700	200		yes	no		1				9
424	20	624	00	00	no		3 00	no	no				2	10 00	15
423	0		00	00	no			no	no			4 00			15
800		500	00	00	no		10 83	yes	no				1	5 00	13
104	0		00	00	no			no	no			3 50			13
545	240	545	00	100	no		6 50	yes	no		1		1	5 00	14
254	0		00	00	no			no	no						15
443	0		150	300	no			no	no			3 00	2	10 00	13
500	65	500	00	00	no		7 00	no	no		2		2	10 00	14
3			00	00	no			no	no						13
131			00	00	no			no	no						13
143			00	00	no			no	no						13
3			00	00	no			no	no						13
143			00	00	no			no	no						11
97			00	00	no			no	no						13
143			00	00	no			no	no						10
143			00	00	no			no	no						14
79			00	00	no			no	no						14
143			00	00	no			no	no						15

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
386																	18
119																	18
148																	18
86																	11
167																	18
148																	14
148																	18
148																	14
186																	18
148																	18
186																	15
60																	14
282	0		0										\$3 00				18
412		\$412					\$7 00						\$3 50				18
380													\$3 00				18
384													4 00				18
380			\$75														18
326	0	357	0				5 00	yes									18
182			*					no									18
191			0										3 00				18
486													3 50				14
306			0										3 00		1	\$5 00	14
380	0	380	0				12 00	yes			1		\$2,000		1	5 00	14
847		847	0				5 00						1,000		1	5 00	20
110			0					no					3 50		1	5 00	17
847			*										*				16
152			0										*				10
429		400	0	\$2,000		\$650		yes			1				1	5 00	22
416		300	0		\$2,000	200			organ		1			1,000	1	5 00	10
780	\$50	312	0		no			no	none				9 00		1	5 00	8
282			*										3 00				18
310			0										*				11
380			*										*	150	1	5 00	16
195																	10
380		350	0		1,400			yes	organ		2						18
500			0		no			no	none				8 75				14
409			0										8 50				14
585		585	0				10 00				1		*				16
173			*										*				18
380			0										3 00				14
69			*										*				14
156			0										3 50		1	5 00	15
303			0										3 50				14
455			0								1		3 50		1	5 00	12
325			*										*				16
260			*										*				12
325			*										*	150			14
509		509	0		1,800	500					1			1,000	1	5 00	18
280		280	0		no		6 00	yes			1				1	5 00	14
478	0	478	0				6 00	no									17
228			*										*				10
156			*										*				18

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of <div></div> on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting house, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	do you belong to.	Weekly benefit in case of sick-ness or accident.	Are began work.	
										Daily papers.	Weekly papers.	Magazines.					
3857		3857	* \$150	0	no		\$22 00	yes	none	1	2			1	\$5 00	14	
548		548	0	0	no	\$150		no	"							16	
156			* 10	\$10	no			no	"							16	
156	0		*	0	"			"	"							15	
448	0	400	0	0	"		\$ 00	yes	"							12	
173			*	0	"			no	"							17	
174			*	0	"			"	"							13	
178			*	0	"			"	organ							13	
182			*	0	"			"	none							12	
312			* 25	0	"			"	"				\$4 00			16	
156			*	0	"			"	"				*			13	
380			0	0	"			"	"				3 80	1	5 00	14	
498		325	0	0	"		\$ 00	yes	"	1			*	1	5 00	12	
196			*	0	"			no	"				*			12	
361			100	0	"			"	"				6 00	1	5 00	14	
408	0	350	40	0	1,000	400		yes	"					1	5 00	12	
182			10	0	no			no	"				3 00			12	
282	0		0	0	"			"	"		1		3 50			11	
390			*	0	"			"	"	1			*			10	
208			*	0	"			"	"				*			14	
322			*	0	"			"	piano		1		*			15	
208			*	0	"			"	none				*			13	
510	0	450	0	0	"		6 00	"	"				*			14	
455	0		*	0	"			"	"				*			12	
288			*	0	"			"	"				*			14	
364	0		* 25	0	"			"	"		1		3 00			8	
187			*	0	"			"	"				*			13	
5			*	0	"			"	"				*			14	
390			0	0	"			"	"		1		1 00			14	
280			*	0	"			"	"				*			12	
780		780	0	200	1,400		5 00	"	piano	1						12	
374		334	50	0	no			"	none		1	1				17	
736		350	0	50	1,000	600		yes	organ	1	2	3		3,000	3	15 00	14
585	0	585	0	0	1,700	250		"	none							9	
182	0		*	0	no			no	"				*			15	
580		500	0	0	"		3 00	yes	"	1				1,000	1	5 00	11
318	\$40		0	0	"			no	"				3 50			14	
473	0	473	0	0	"		6 00	yes	"		1					10	
368		368	0	0	"		6 00	"	"					1	5 00	12	
323			*	0	"			no	"				*	2	5 00	19	
158			5	0	"			"	"				*			14	
580		580	0	0	"		6 50	"	"					1	5 00	14	
498		300	0	0	"		7 00	"	"					1	5 00	15	
429	0	349	80	0	"		5 00	"	"		1			1	5 00	6	
334			*	0	"			"	"				*			9	
331	0	331	0	0	"		4 50	yes	"							14	
317	0		0	0	"			no	"				3 00	1	5 00	14	
174			*	0	"			"	"				*			14	
349			*	0	"			"	"				*			12	
178			*	0	"			"	"				*			12	
299			*	0	"			"	"				*			12	
9			*	0	"			"	"				*			14	
158			*	0	"			"	"				*			11	
364		364	0	0	"		12 00	yes	"	1			*	1	5 00	18	

* Keeps boarding house.

* Gives wages to parents and lives at home.

† Lives at home but pays no stated amount.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	Cause for loss of time.	Wages received.
Laborer.....	58	Holland...	Holland...	u	shop closed	\$1 25 d
Tinner.....	26	"	"	u	no work	2 00 "
Finisher.....	20	Michigan...	Germany...	i	"	8 00 w
"	23	Wis.	U. S.	i	"	7 00 "
Trimmer.....	27	Michigan...	"	u	"	8 00 "
Stock-man.....	20	"	Holland...	i	-----	1 00 d
Cabinet-maker...	28	New York...	U. S.	i	no work	1 50 "
Tinsmith.....	34	Holland...	Holland...	u	shut down	7 50 w
Nailer.....	14	"	"	i	"	8 15 "
Laborer.....	31	Poland...	Poland...	u	not in U. S.	1 25 d
Machine hand...	27	Michigan...	U. S.	v	-----	10 00 w
"	14	Cal.	"	i	first work	8 50 "
Carries stock...	14	Michigan...	"	i	"	3 00 "
Putting up refrig.	17	Holland...	Holland...	i	"	75 d
Machine hand...	16	"	"	i	not answered	8 50 w
Gluer.....	14	Michigan...	Germany...	i	first work	8 00 "
Building refrig.	48	Vermont...	U. S.	u	no work	1 50 d
Trimmer.....	33	Michigan...	"	u	"	1 50 "
Finisher.....	25	Germany...	Germany...	i	-----	1 25 "
Tinner.....	23	Holland...	Holland...	i	-----	1 00 "
Machine hand...	16	Michigan...	"	i	-----	8 50 w
"	16	Holland...	"	i	-----	8 50 "
Tinner.....	14	"	"	i	first work	2 50 "
Machine hand...	34	Canada...	Canada...	u	no work	10 50 "
Lumber inspect'r	40	"	"	u	-----	8 00 d
Machine hand...	18	Ohio.....	U. S.	i	-----	5 00 w
"	18	Germany...	Germany...	i	-----	75 d
Laborer.....	33	Poland...	Poland...	u	-----	1 25 "
Nickel plating...	20	Michigan...	U. S.	u	no work	6 50 w
Stock carrier...	15	N. Zealand	N. Zealand	i	-----	8 50 "
Filler.....	32	Holland...	Holland...	i	-----	1 00 d
Packer.....	15	"	"	i	no work	3 15 w
Elevator man...	44	Michigan...	U. S.	u	"	1 25 d
Cabinet-maker...	19	Penn.	Germany...	i	shut down	4 50 w
Laborer.....	37	Poland...	Poland...	u	-----	8 25 "
Machine hand...	19	Michigan...	U. S.	i	no work	1 75 d
McCord & Bradfield Furniture Co.						
Finisher.....	51	Holland...	Holland...	u	-----	1 25 "
"	27	"	"	u	no work	10 00 w
Cabinet-maker...	35	Ohio.....	U. S.	u	-----	12 00 "
Finisher.....	20	Indiana...	"	i	no work	7 50 "
Cabinet-maker...	22	Holland...	Holland...	i	"	6 00 "
"	30	"	"	u	not answered	7 50 "
"	23	"	"	i	no work	8 00 "
Finisher.....	19	Michigan...	"	i	"	6 00 "
Band-paperer...	15	Holland...	"	i	first work	3 75 "
Stainer.....	23	N. J.	Ireland...	w	no work	8 00 "
Cabinet-maker...	29	Canada...	Canada...	u	not answered	10 00 "
"	35	England...	England...	u	no work	11 00 "
Finisher.....	24	Holland...	Holland...	u	"	9 00 "
Cabinet-maker...	71	Ohio.....	U. S.	u	-----	1 75 d
Machine carver...	25	Germany...	Germany...	i	-----	8 00 w

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What medical instruments have you.	No. of newspapers and magazines taken.			If boarding cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
6424		6424	0	0	no		\$7 00	yes	none		1						13
546	\$40	500	\$46	0	\$1,200	\$765											14
384			0	0	no			no	"				\$5 50		1	\$5 00	12
334			0	0	"			"	"				†				18
508		365	0	0	"		7 00	"	"		1						13
312			0	0	"			"	"				5 00				14
429			0	0	1,000	500		yes	organ	1	1						16
387	0	387	0	0	no		5 00	yes	none		1						14
157			*	0	"			no	"				*				11
130	0	130	0	0	"		8 50	"	"								12
552		552	0	0	"		16 00	yes	"	1	1						14
121			*	0	"			no	"								12
52			0	0	"			"	"				2 50				13
117			0	0	"			"	"				3 50				16
167			*	0	"			"	"				* 50				13
78			*	0	"			"	"				*				13
440		440	0	0	"		7 00	yes	"	1	1						13
380		380	0	0	"		6 00	yes	"	1	1			1,000	1	5 00	16
380	0		0	0	"			no	"				†		1	5 00	14
312			0	0	"			no	"				8 00				10
189			*	0	"			"	"				*				14
182			*	0	"			"	"				*				14
5			*	0	"			"	"				*				14
523		523	0	0	"		4 75	yes	organ	1	1			1,000			15
986		300	0	0	1,200			no	none	1	1				1	5 00	12
280			0	0	no			"	"				2 50				12
284			*	0	"			"	"				*				12
390	80	390	0	0	800			yes	"								12
310		310	0	0	400	106	4 00	no	"								9
182			*	0	no			"	"				*				14
312	200		50	50	"			"	"				3 50		1	5 00	18
123			*	0	"			"	"				*				14
325		325	0	0	4,000	2,600		yes	organ		1		2 00		1	5 00	15
224			0	0	no			no	"								17
429	150	429	0	0	1,400	150		"	"				3 50		1	5 00	12
500			0	0	no			"	"						1	5 00	15
640	0	365	0	0	800			"	"					3,000			14
438		438	0	0	800			yes	"		1						12
624		624	0	0	no		9 00	"	"	1			4 00				17
325			0	0	"			no	"				3 00				10
284			0	0	"			"	"								12
227	0	227	0	0	"		5 00	"	"		1						16
347			0	0	"			"	"				3 00		1	5 00	12
260			*	0	"			"	"				*				15
65			*	0	"			"	"								14
381			0	0	"			"	"	1			3 50	600			13
380		870	0	0	"		6 00	yes	"		1						14
429		365	0	0	1,000	800		"	"		2						13
429	0	429	0	0	800	400		no	"		1				1	5 00	12
896		466	0	0	no		8 00	"	"	2	3	1		2,000			10
416			0	0	"			"	"				3 50				12

* Gives wages to parents and lives at home.

† Lives at home and pays no stated amount.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$749	0	\$300	0	0	\$1,500			yes	none		2						13
156	0		*	0	no			no	"								12
325	0	325	0	0	"			"	"								14
416	0		0	0	"			"	"				\$3 00				15
350	0		0	0	"			"	"				50				10
429	0	365	0	0	400	\$300		yes	"								14
362	0		*	0	no			no	"				*				18
477	0	477	0	0	800	400		yes	"		1						13
195	0		*	0	no			no	"				*				13
331	0		0	0	"			"	"				3 00				9
433		365	0	0	"			yes	banjo	1							13
433		433	0	0	550	150		no	none	1							18
812			0	0	no			no	"		1		3 50				16
232	0	232	0	0	200			"	"		1						14
350	0	305	0	0	600	500		"	"		1						14
156			\$2	0	no			"	"				2 00				13
347		312	0	0	60	200		"	piano		1						16
325	0	250	25	0	400	300		"	none		1						13
380	\$10	340	50	0	no			yes	"		1						14
455	0	375	50	\$100	"		3 00	"	"		1						12
211	0	200	0	0	"		4 00	no	"								13
331	0		*	0	"			"	"				*				12
468			0	0	"			"	"				10 00				15
347	0		0	0	"			"	"				4 00				14
349			*	0	"			"	"				*				14
236			0	0	"			"	piano				3 50				13
308	0		0	0	"			"	none	1	1		3 00				14
433	0	433	0	0	"		7 00	yes	organ		4				1	\$5 00	12
207			*	0	"			no	"				*				14
334	0	300	0	0	"		8 00	"	"								18
780		500	0	0	"		8 00	yes	"		1						14
477		425	0	0	"		7 00	no	"	1							14
455	0		*	0	"			"	"		1		*				14
457	75	300	0	0	650	450		"	"		1						14
174			*	0	no			"	"				*				12
366	30		*	0	"			"	"				*				13
357	0	325	0	0	500			"	"								14
390	0		25	60	no			"	"				3 75		1	5 00	13
390	0	350	0	0	"		2 00	"	"								13
401	0	400	0	0	"		5 00	yes	"		1						10
390			0	0	"			no	"		1		8 00				14
535		500	25	0	"		6 00	yes	"	1				\$3,500			13
390	75		25	0	"			no	organ		2		3 25				15
498		450	50	100	"		5 00	"	none	1							13
390	0		50	100	"			"	"				3 75				14
412	0	450	0	0	750	700		yes	"		1			50			14
390	50		0	0	no			no	"				3 50				15
455	0	425	0	0	"			yes	"		1			100			14
455		400	50	0	1,500			"	"		1						14
555	0	550	0	0	500	125		"	"								13
455	0	375	25	0	750	875		"	"		1						14
351	25	350	0	0	no		6 00	no	"								13
325	0		0	0	"			"	"				4 00				13
455	0	400	0	0	"		4 50	yes	"								13
390	40	400	0	0	"		6 00	no	"		1						14

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation	Eng. in year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Machine ha.	77		no work	38 00 w
Finisher...	52		"	1 25 d
Machine ha.	78		school	8 50 w
"	52		laid off	2 00 d
Cabinet-ma.	208		worki'g at home	4 00 w
Machine ha.	156		no work	1 06 d
"	28		"	2 50 "
Carver.....	28		no work & sick	4 00 w
Machine ha.			"	4 00 "
"	78		no work	18 00 "
Cabinet-ma.			"	10 00 "
Finisher....	28		no work	4 00 "
"	104		"	1 25 d
"			"	7 00 w
"	182		no work	9 00 "
"			"	9 00 "
"	104		"	9 00 "
"	182		"	9 00 "
"	182		"	11 00 "
"	52		"	1 25 d
"	62		"	11 00 w
"	52		"	10 00 "
"	28		sick and no wrk	2 25 d
"			"	11 00 w
Cabinet-ma.	62		no work	11 00 "
Finisher....	78		"	7 00 "
"	52		sickness	11 00 "
"	208		no work	1 25 d
"	78		"	1 25 "
Cabinet-ma.			not in U. S.	1 25 "
Finisher....			"	1 00 "
"	28		no work	7 50 w
"			"	7 00 "
Oil finisher	28		no work	1 50 d
"	28		"	1 75 "
"			"	1 25 "
Finisher...	28		no work	1 00 "
"			"	1 50 "
Oil finisher	28		no work	1 50 "
"	78		"	1 75 "
"	19		"	9 50 w
"			"	
"	52		sick and no wrk	10 50 "
"	28		no work	1 75 d
"	28		"	1 50 "
"	28		"	1 00 "
"			"	7 50 w
Cabinet-ma.	28		no work	10 00 "
"	28		"	1 75 d
"	19		"	8 00 w
"	52		"	9 00 "
"	19		"	1 55 d
"	28		"	1 25 "
Packer.....	28		"	1 50 "
"			"	1 00 "
Cabinet-ma.	78		no work	1 07 "
Packer.....	65		"	1 50 "
Machine ha.	18		shut down	9 00 w
Laborer....	19		no work	8 00 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
812			0	0	no			no	none				\$8 00				12
435	\$17	\$375	\$50	0	\$800	\$100		yes	"		1		*				12
198			0	0	no			no	"								12
520		520	0	0	"		\$6 00	yes	"	1	2		\$2 00				9
69			0	0	"			no	"								12
259		259	0	0	"		5 00	yes	"	1	1	1					15
715		280	200	0	1,000	400		yes	"	1	1		*				14
191				0	no			no	"				*				12
208			*	0	1,000			yes	"	1			*				12
507		505	0	0	1,200	600		yes	"	1							12
520			0	0	no			no	"				\$3 50				14
191			*	0	"			"	"				*				12
280			*	0	"			"	"				*				11
354			*	0	"			"	"				*				12
195			*	0	"			"	"				*				12
312			0	0	"			"	"				\$3 50				18
195			*	0	"			"	"				*				11
228		228	0	0	750	750		yes	"		1	1					9
325			0	0	no			no	"				\$3 00				15
477		477	0	0	1,000			yes	"								16
433			0	0	no			no	"				\$2 50				16
643		416	0	0	900	450		yes	"								14
572		546	25	0	no		6 00	"	"	1			\$300				12
477		477	0	0	"		6 00	no	"	1	1		*				19
273			*	0	"			"	"								12
477		477	0	0	"			yes	"				1,000				14
120		120	0	0	"		5 00	"	"		1						12
292			0	0	"		8 00	"	"	1							12
280			0	0	"			no	"				\$3 50				12
312			0	0	"			"	"				\$3 50				15
367	5	300	0	0	"		4 00	"	"	1			*		1	\$5 00	15
364			*	0	"			"	"								10
429	14		80	0	"			"	"				\$3 25				12
478		400	100	\$1,000	"		9 00	yes	"	1			\$3 25		1	5 00	20
380		380	0	0	"		6 00	no	"		1						12
458	100	385	25	0	700	250		"	"		1						14
498	60		0	0	no			"	"				\$3 25				11
429	30	350	0	0	"		4 00	"	"								12
421	8	400	21	0	650	270		yes	"		1						18
463	0	385	50	0	no		6 00	no	"								13
455	100		0	0	"			"	"				\$3 50				15
478	25	280	50	0	700	150		yes	"				†	84			12
409	0		0	0	no			no	"								6
286	0	300	0	0	"		6 00	"	"		1						14
390	0		0	0	"			"	"				\$3 50				12
477			150	0	"			"	"				\$3 00				13
500	25	500	0	0	"		7 50	yes	"		1			240			14
390		365	0	0	1,500			no	"								18
390		390	0	0	600	500		yes	organ	1	1			1,500			19
458		350	0	0	900			no	none					90			15
367	40		0	0	no			"	"				\$3 00				17
409			50	100	"			"	"				4 00				15
429		350	50	0	700	250		yes	"	1							16
408			100	0	no			no	"				†				13
370		370	0	0	"		6 00	yes	"								11
448			*	75	"			no	"				*				12
146			0	0	"			"	"								12

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending	Wages received.
ORIEL CABINET COMPANY.							
Carver.....	35	U. S.....	U. S.....	m	3	0	\$6 30 d
".....	39	Russia.....	Russia.....	m	3	0	8 30 "
Cabinet-maker.....	37	Sweden.....	Sweden.....	m	3	0	18 00 w
Machine hand.....	39	Holland.....	Holland.....	m	1	1	10 00 "
Cabinet-maker.....	46	Sweden.....	Sweden.....	m	1	1	12 00 "
".....	31	Switz.....	Switz.....	m	0	0	13 00 "
Carver.....	37	Michigan.....	Germany.....	m	5	0	8 50 d
".....	31	U. S.....	".....	"	"	"	8 30 "
".....	41	Switz.....	Switz.....	m	3	0	8 30 "
".....	39	U. S.....	U. S.....	m	1	1	8 30 "
".....	33	Germany.....	Germany.....	m	3	0	3 30 "
".....	40	Holland.....	Holland.....	m	5	0	3 30 "
".....	31	U. S.....	U. S.....	"	"	"	2 75 "
".....	40	Wisconsin.....	Germany.....	m	3	0	3 30 "
".....	41	Holland.....	Holland.....	m	3	0	3 30 "
".....	36	Mass.....	Ireland.....	m	3	0	3 30 "
".....	31	U. S.....	Holland.....	m	1	1	3 30 "
".....	17	".....	U. S.....	"	"	"	2 50 w
".....	19	".....	Germany.....	"	"	"	5 60 "
Cabinet-maker.....	48	Holland.....	Holland.....	m	4	0	11 00 "
".....	36	Germany.....	Germany.....	m	3	0	12 00 "
".....	33	".....	".....	m	1	1	12 00 "
".....	28	Switz.....	Switz.....	"	"	"	1 75 d
".....	26	Ireland.....	Ireland.....	"	"	"	12 00 w
".....	46	Germany.....	Germany.....	m	3	0	12 00 "
".....	33	".....	".....	m	6	0	12 00 "
".....	47	England.....	England.....	m	3	0	15 00 "
".....	35	Germany.....	Germany.....	"	"	"	12 00 "
".....	33	".....	".....	m	3	0	12 00 "
".....	52	Holland.....	Holland.....	m	3	0	12 00 "
".....	58	England.....	England.....	m	1	1	12 00 "
Machine repair'r.....	46	U. S.....	U. S.....	m	4	0	2 25 d
Cabinet-maker.....	38	Austria.....	Austria.....	m	5	0	12 00 w
".....	42	Germany.....	Germany.....	m	3	0	12 00 "
".....	25	Scotland.....	Scotland.....	"	"	"	12 00 "
".....	23	Germany.....	Germany.....	"	"	"	15 00 "
".....	27	".....	".....	m	6	0	12 00 "
".....	31	".....	".....	"	"	"	12 00 "
".....	23	".....	".....	"	"	"	15 00 "
".....	36	".....	".....	m	5	0	10 00 "
Rubber.....	23	U. S.....	U. S.....	m	1	1	3 00 d
".....	34	Germany.....	Germany.....	m	1	1	1 00 "
".....	49	".....	".....	m	3	0	1 00 "
".....	39	Holland.....	Holland.....	m	3	0	1 00 "
".....	35	".....	".....	m	1	1	1 00 "
".....	40	".....	".....	m	2	0	1 00 "
".....	29	Sweden.....	Sweden.....	m	3	0	1 00 "
".....	23	".....	".....	m	0	0	1 00 "
".....	50	Holland.....	Holland.....	"	"	"	1 00 "
".....	31	".....	".....	"	"	"	1 00 "
".....	53	".....	".....	m	7	0	1 00 "
Machine hand.....	25	".....	".....	"	"	"	10 00 w
Laborer.....	15	U. S.....	Sweden.....	"	"	"	2 50 "
Polisher.....	31	".....	U. S.....	"	"	"	1 25 d
".....	27	Holland.....	Holland.....	m	3	0	1 25 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefits in case of sickness or accident.	Age began work.
\$987		\$700	\$200	0	\$2,000			yes	none	1		\$2,000	1	\$5 00	15
987	\$50	987	0	0	no		\$7 00	no	"	1			1	5 00	17
648	0	500	100	0	900	\$125		yes	"	1		1,000			16
498	0	425	0	0	no		6 00	"	"	1			1		13
468	0	425	0	0	800	500		"	"	1			1	4 00	14
648	0	500	148	0	1,100	550		no	flute	1		1,000			15
1,082		682	400	0	1,500			yes	none	1		3,000	1	5 00	15
987			800		no			no	"	1			1	5 00	15
987	0	600	800	\$700			11 00	yes	"	1	\$4 00	1,700	1	5 00	18
987	0	500	800	0	1,500	87		yes	"	1			1	5 00	12
987	0	700	200	350	no		6 00	"	"	1		1,500	2	10 00	18
987	0	600	200	40	"		6 00	"	"	1			1	5 00	13
582			0	1,400	"			no	"	1	3 00		1	5 00	16
858		758	100	0			10 00	yes	piano	3		2,000	3	5 00	13
987	0	800	0	0	1,000	900		yes	none	1			1	5 00	15
1,088		800	300	0	1,200			"	piano	1		8,000	3	10 00	12
987		500	400	900	no		4 00	no	none	1			1	5 00	15
130			*	0	"			no	"						15
274				0	"			"	"						16
548	0	500	48	0	1,500	1,000		yes	piano	1					14
598	0	550	0	0	900	800		"	none	1			1	5 00	16
648	0	500	100	0	900			"	"	1			1	5 00	16
409	0		0	0	no			no	"		3 50		1	5 00	16
598	0		0	0				"	"		†		1	5 00	14
573	0	500	0	0	800			yes	"	1					15
648	0	600	0	0	no		7 00	"	"	1			1	5 00	13
747	0	700	0	1,000	"		7 50	"	organ	1		8,000	1	5 00	12
648	0	100	150	0	"			no	none	1		2,000	2	10 00	14
598	0	550	0	0	700	350		yes	"	1	5 00		1	5 00	15
598	0	500	75	0	1,800	750		yes	piano	1					12
598	0	450	0	0	3,000			"	none	1					13
702		702	0	0	no		5 00	yes	"	1		2,000	2	1 00	12
648	0	600	48	0	800	500		no	"	1		150	1	5 00	13
683	0	600	0	0	no		7 00	yes	"	1		2,000	1	3 00	19
648	0		100	400	"			no	organ	1	4 00	2,000			15
747	0	50	50	0	"			"	none		4 00		2	10 00	13
598	0	550	0	0	"		10 00	yes	organ	1			1	5 00	14
747	0	50	150	0	"			no	none	1	4 00				16
747	0	50	200	0	"			"	"	1	4 00	2,000	1	5 00	14
498	0	450	0	0	900	75		"	"	1			1	5 00	16
585		250	200	200	no		6 50	"	"	2	1				14
489		250	200	0	1,700	150		yes	"				1	5 00	14
489	200	450	25	0	1,300			no	"	2			1	5 00	14
489	0	450	0	0	no		5 00	yes	"	1					12
489	0	400	50	0	1,000	450		"	"						12
489	0	450	0	0	no		4 00	no	"						12
458	0	400	25	0	800	400		yes	"						19
499	0	400	0	0	no		4 50	"	"	1					12
478	0		0	0	"			no	"		3 50				14
490	0		0	0	"			"	"		3 75				12
430	0	450	0	0	800	450		"	"	1					14
438			50	0	no			"	organ		†				12
130				0	"			"	none	1					15
874			25	0	"			"	"	1	4 00				15
380		375	0	0	"		7 00	"	"	1					14

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Polisher.....	37	Ireland	Ireland	s	—	—	0	1½	1½	11½	18	no work	\$1 25 d
Finisher.....	19	Canada	Germany	m	—	0	0	2	2	11½	18	"	1 00 "
Polisher.....	42	Ireland	Ireland	m	—	0	0	1	1	12½	—	"	1 00 "
Rubber.....	26	Holland	Holland	s	—	—	0	4m	4m	8	104	not answered	1 25 "
Polisher.....	19	U. S.	"	s	—	—	0	7m	7m	12	—	"	7 00 w
".....	30	"	Ireland	s	—	—	0	8m	8m	12	—	"	1 25 d
".....	33	"	"	s	—	—	0	8	3	11½	6	no work	1 45 "
".....	19	Ireland	"	s	—	—	0	8m	8m	12	—	"	1 25 "
Rubber.....	30	U. S.	U. S.	s	—	—	0	2m	2m	12	—	"	1 00 "
".....	35	Germany	Germany	s	—	—	0	21	½	8	104	not answered	1 00 "
".....	26	U. S.	Ireland	s	—	—	0	1½	1½	11½	18	no work	1 00 "
Polisher.....	26	Ireland	"	s	—	—	0	1	1	12	—	"	1 25 "
Varnisher.....	38	Holland	Holland	m	3	1	3	15	½	12	—	"	1 90 "
Dopper.....	33	"	"	m	1	1	3	8m	8m	11½	18	no work	1 25 "
Carver.....	17	Germany	Germany	s	—	—	0	2	2	11½	13	"	4 00 w
Cabinet-maker.....	33	W. Indies.	"	m	3	0	4	13	4	11½	18	"	1 85 d
Trimmer.....	26	Sweden	Sweden	s	—	—	0	10	2m	10	52	"	1 50 "
Cabinet-maker.....	36	Holland	Holland	m	1	1	4	15	7	11½	18	sickness	2 25 "
Trimmer.....	35	"	"	m	4	2	5	18	3½	11	26	no work	2 00 "
".....	31	Germany	Germany	s	—	—	0	3½	3½	10½	30	"	2 00 "
".....	26	Michigan	Holland	m	—	—	0	7	5	10	52	"	2 00 "
".....	31	Holland	Holland	m	1	0	3	4	4m	10	52	"	1 50 "
".....	27	U. S.	U. S.	m	1	0	3	3½	1½	10½	30	"	10 00 w
".....	36	Austria	Austria	s	—	—	0	1	1	12	—	"	10 00 "
Engineer.....	30	U. S.	U. S.	m	2	1	3	8	5	12	—	"	2 75 d
Trimmer.....	31	Germany	Germany	m	1	0	2	8	8m	10	52	no work	1 75 "
".....	39	U. S.	U. S.	m	3	0	4	8	2½	11½	19	"	11 00 w
Machine hand.....	16	Germany	Germany	s	—	—	0	1	1	10½	30	"	3 25 "
Packer.....	22	U. S.	"	m	1	0	2	7	6	12	—	"	2 25 d
".....	24	"	U. S.	s	—	—	0	4	3	10½	30	no work	1 75 "
Machine hand.....	17	Ireland	Ireland	s	—	—	0	2	1½	11½	13	"	1 25 "
Packer.....	23	Holland	Holland	s	—	—	0	½	½	6	—	first wrk in U.S.	1 00 "
".....	26	U. S.	Ireland	s	—	—	0	4	8m	12	—	"	10 00 w
Laborer.....	41	Germany	Germany	m	3	3	4	3	3	10	52	no work	1 35 d
Lumberscaler.....	48	Holland	Holland	m	4	3	5	20	3½	11	26	"	2 00 "
Fore'n lumb'r yd.....	54	"	"	m	12	3	7	12	9	12	—	"	1 75 "
Laborer.....	47	"	"	m	3	2	4	1	1	11	26	no work	1 25 "
Finisher for man.....	39	Ohio	Germany	m	0	0	1	23	5	12	—	"	3 00 "
Filler.....	22	Ireland	Ireland	s	—	—	0	1w	1w	12	—	"	1 25 "
Stainer.....	23	"	"	s	—	—	0	4m	4m	6	—	first wrk in U.S.	6 50 w
Dopper.....	30	Holland	Holland	m	0	0	1	1	10m	11	26	no work	1 25 d
Inspector fin. wk.....	41	U. S.	Ireland	w	1	1	1	3	3	10	52	traveling	2 00 "
Filler.....	22	Ireland	"	s	—	—	1	5m	5m	4½	—	first wrk in U.S.	7 00 w
Polisher.....	18	U. S.	U. S.	s	—	—	0	1½	1½	10	52	traveling	6 50 "
Filler.....	57	Holland	Holland	w	3	0	5	1	1	12	—	first wrk in U.S.	1 25 d
".....	19	Ireland	Ireland	s	—	—	0	5m	5m	6½	—	no work	6 50 w
".....	30	"	"	s	—	—	0	1	1	11½	6	"	1 00 d
".....	20	Holland	Holland	s	—	—	0	2m	2m	9	78	not answered	1 00 "
".....	26	"	"	m	1	0	2	8m	8m	8	—	not in U. S.	1 00 "
".....	23	"	"	m	1	0	2	1	½	10½	30	no work	1 25 "
".....	28	"	"	m	1	0	2	2	8m	11½	18	"	1 25 "
Finisher.....	25	U. S.	Germany	s	—	—	0	10	2	11	26	"	1 00 "
Stainer.....	30	Holland	Holland	s	—	—	0	2	1	11½	18	"	8 00 w
Finisher.....	27	Canada	England	m	2	2	3	6	½	11½	18	"	8 50 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
374	0		0	0	no			no	none				8 50				14
368				0	no					3	2		8 50				16
458		\$400	0	0	\$1,400	\$900							8 50				14
380	0	876	0	0	no		\$6 00						8 50				12
380	0		0	0	no								8 50				14
364			*	0									4 00				11
390			0	0						1			3 00				15
448			0	0									3 00				18
390			0	0									4 00				13
458			0	0									8 50				14
388	0		0	0									8 50				14
478			0	0									8 50				18
390	0		0	0									8 50				18
598		500	\$50		2,500	800		yes					8 50		1	\$5 00	15
374	0	360	0	0	625	325											18
198			*	0	0	no		no					*				15
558	0	500	0	0	no		6 50	no				1					15
390	\$50		75	\$30								1		\$1,000			16
708	0	800	100	0	1,400			yes	organ	1	1		4 00				16
572	10	450	125	0	800	700			none	1							17
548	80		40	40	no			no				2	4 00		1	5 00	14
520			0	0						1	3		5 00				15
390		225	50	0	900	400		yes		1	1						18
455		425	0	0	no			no						150			11
520	0		0	0	no							1	4 50				18
868		500	358	0	1,500	550		yes	organ	1				3,000	2	5 00	22
455	0	375	75	0	1,000	700		no	none		2						15
538		500	0	0	no		8 00	yes			1						14
211			*	0	0			no					*				15
702		550	100	0	900	300		yes				1			1	5 00	18
478			0	0	no			no				1					16
374			0	0	"			"					5 00				14
156	0		0	0	"			"					3 00				12
520			0	0	"			"					4 00				13
351	0	350	0	0	"			yes				1			1	5 00	16
572	0	450	75	0	1,000	300		"									18
546	0	450	50	0	1,100	300		no	organ		1						13
357	0	350	0	0	no		6 50	no	none		1						12
928		988	0	0	"		10 00	yes		2				3,000			14
390			0	0	"			no					4 00				18
160	0		0	0	"			"					8 50				12
357	0	300	0	0	"		4 25	yes									18
620	0		50	50	"			no		1		1	4 00				9
138	0		0	0	"			"				1	5 00				12
282			0	0	"			"				1	†				16
390	0	260	0	0	600	300		"									12
188	0		0	0	no			"					8 50				18
488	0		100	300	"			"		1			3 00		1	5 00	14
224		*	0	0	"			"		1			*				12
308	0	208	0	0	"		4 00	"			1						18
241	0	300	0	0	"		4 00	yes									13
374	0	350	0	0	"		5 00	no			1						12
458			25	0	"			"					8 50				15
390	0		*	0	"			"					*				12
428	0	400	23	0	700	145		yes									18

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country)	Nativity of parents.	Married or single.	No. of children in family.	Cause for loss of time.	Wages received.
Stainer.....	34	Sweden	Sweden	s	..	no work	\$9 50 w
Filler.....	31	U. S.	U. S.	s	..	no work	1 00 d
Sand-paprerer.....	59	Holland	Holland	m	7	no work	1 25 "
Finisher.....	21	Germany	Germany	m	..	"	1 50 "
Varnisher.....	24	U. S.	U. S.	m	..	"	1 80 "
Sand-paprerer.....	59	Holland	Holland	m	..	"	1 00 "
Varnisher.....	31	"	"	s	..	"	1 80 "
".....	30	"	"	s	..	"	1 80 "
".....	31	U. S.	U. S.	m	..	"	10 00 w
".....	46	"	Germany	m	..	"	10 00 "
".....	19	"	"	m	..	traveling	1 60 d
Sand-paprerer.....	40	Holland	Holland	s	..	no work	1 25 "
SLIGH FURNITURE CO.							
Varnisher.....	19	Michigan	"	s	..	"	8 00 w
Cabinet-maker.....	18	"	Ireland	s	..	sickness	8 00 "
Machine hand.....	18	"	Holland	s	..	no work	1 00 d
Cabinet-maker.....	20	Holland	"	s	..	"	4 00 w
Teamster.....	27	Michigan	U. S.	m	1	"	1 25 d
Cabinet-maker.....	18	Holland	Holland	s	..	"	1 00 "
Machine hand.....	18	Michigan	"	s	..	"	4 20 w
Lumber-scaler.....	21	"	"	m	1	"	1 30 d
Sander.....	11	"	S.	s	..	"	8 50 w
".....	9	"	Holland	m	1	sickness	1 00 d
Cabinet-maker.....	31	"	"	m	3	"	8 40 w
".....	41	"	S.	m	3	no work	9 00 "
Laborer.....	47	"	Denmark	m	3	sickness	1 20 d
Machine-helper.....	11	"	Holland	s	..	"	3 00 w
Cabinet-maker.....	11	"	Germany	s	..	"	1 00 d
Upholsterer.....	21	"	Holland	m	1	"	7 50 w
Machine hand.....	21	"	S.	s	..	"	1 40 d
Cabinet inspector.....	31	"	France	m	0	"	9 00 w
Cabinet-maker.....	21	"	Holland	m	0	no work	8 00 "
Gluer.....	20	"	"	s	..	sickness	1 25 d
Finisher.....	20	Michigan	"	s	..	"	1 75 "
".....	19	Holland	"	s	..	no work	1 80 "
".....	21	"	"	s	..	"	1 70 "
".....	25	Russia	Russia	s	..	"	1 30 "
Oil finisher.....	53	Holland	Holland	m	5	"	1 25 "
Foreman, finisher.....	35	New York	U. S.	m	1	"	100 00 m
Oil rubber.....	28	Germany	Germany	m	4	no work	1 75 d
".....	37	Holland	Holland	m	4	not in U. S.	1 00 "
Laborer.....	15	"	"	s	..	first work	2 50 w
Polisher.....	28	"	"	m	2	"	9 00 "
Filler.....	23	"	"	s	..	no work	4 20 "
Machine hand.....	15	Michigan	Ireland	s	..	first work	8 00 "
Stock-keeper.....	40	Holland	Holland	wr	9	no work	1 40 d
Finisher.....	14	"	"	s	..	"	4 20 w
Machine helper.....	27	Michigan	"	m	0	vacation	1 75 d
Sand-paprerer.....	28	Poland	Poland	m	2	"	1 00 "
Laborer.....	32	Michigan	U. S.	m	1	"	10 00 w
Machine hand.....	27	Holland	Holland	s	..	no work	1 40 d
".....	23	"	"	s	..	"	1 80 "
".....	15	"	"	s	..	first work	4 00 w

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, in value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$428	0		\$75	0	no			no	none				\$3 50				13
312	0		0	0	no			no	none				4 00				13
816	0	\$700	78	0	no			yes	none				4 00				13
439			0	0	no			no	none								15
449	0	480	0	0	no	\$220		yes	none								15
442	0	400	0	0	no		\$5 00	yes	none								12
457			0	0	no			no	none				3 50				14
416			150	0	no			no	none				8 00				14
530		350	150	0	no		8 00	yes	organ	1	1		8 00			\$10 00	12
770		688	0	0	no		6 00	no	none	1	1						11
468			0	0	no			no	none				8 50	\$1,000			15
366	0		*	0	no			no	none				*				13
469			*	0	no			no	none	1			*				15
249			*	0	no			no	none				*				13
259			*	0	no			no	none				*				16
308			*	0	no		4 00	no	none				*				16
890		390	0	0	no			no	none				*				10
312			*	0	no			no	none				*				15
218			*	0	no			no	none				*				13
561	0	561	0	0	1,000			no	none				*				11
181			*	0	no			no	none	1	2		*				15
206	0	206	0	0	no			no	none				*				15
437	0	437	0	0	no		5 00	yes	none				*				14
361		351	0	0	no		9 00	no	none				*				15
284	\$5	284	0	0	no		5 00	no	none				*	250			12
156			*	0	no			no	none				*				12
812			*	0	no			no	none				*				14
290		390	0	0	no		5 00	no	none				*				11
437			*	0	no			no	none				*				16
466		466	0	0	250	2,500		yes	none	1			*	1,000			16
351	0		50	0	no		6 00	no	none				*				17
823		240	*	0	no			no	none				*				12
546			50	0	no			no	none				8 00				15
372			*	0	no			no	none				*				13
530			0	0	no			no	none				3 00				12
406	0		0	0	no			no	none	1			4 00				12
890	600	800	0	0	no		6 00	no	none				*				12
1,200		1,200	0	0	no		10 00	yes	none	1	2	1		3,000			19
511	60	450	40	0	1,200	400		no	none				*				14
260	0	312	0	0	no		3 50	no	none				*				15
11	0		*	0	no			no	none				*				14
468	0	300	50	0	1,100	900		yes	none				*				13
204	0		*	0	no			no	none				*				16
78			*	0	no			no	none				*				14
409	200	409	0	0	60	200		yes	none				*				14
218	0		*	0	no			no	none				*				13
511		365	0	0	no		7 50	no	none				*				16
312	100	312	0	0	no		4 00	no	none				*				12
530		530	0	0	no		6 50	yes	none				*				15
409	0		0	0	140			no	none				*				14
562	0		0	0	no			no	none				*				13
104			*	0	no			no	none				*				14

* Gives wages to parents and lives at home.

† Give wages to church society; they board and clothe me.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occu.	Cause for loss of time.	Wages received.
Helper in shop...	30	Poland	Poland	m	0	0	1	1	shut down	\$1 20 d
Finisher's helper	51	Holland	Holland	w'r	0	0	0	0	shut down	1 25 "
Cabinet-maker	31	"	"	m	0	0	1	1	shut down	1 75 "
"	15	Michigan	"	s	"	"	0	0	shut down	3 00 w
Machine hand	15	"	"	s	"	"	0	0	shut down	1 25 d
"	26	Canada	Scotland	s	"	"	0	0	no work	1 40 "
Cabinet-maker	35	Holland	Holland	s	"	"	0	0	shut down	3 00 w
"	30	"	"	s	"	"	0	0	no work	9 00 "
Finisher	19	Illinois	Ireland	s	"	"	0	0	"	3 00 "
"	31	Holland	Holland	m	3	2	4	1	shut down	1 75 d
"	30	"	"	m	1	0	2	4	"	1 50 "
Cabinet-maker	10	Michigan	"	s	"	"	0	0	no work	4 50 w
Finisher	34	Holland	"	m	2	2	4	1	"	1 65 d
"	38	"	"	m	1	1	2	1	"	9 00 w
"	42	"	"	m	2	0	3	1	"	9 00 "
"	30	"	"	m	7	3	3	1	no work	7 50 "
"	37	"	"	m	5	2	6	1	"	7 50 "
"	42	"	"	m	3	1	4	1	no work	7 50 "
"	30	"	"	m	2	1	4	1	illness of wife	7 50 "
"	25	"	"	s	"	"	0	0	"	1 40 d
Laborer	30	"	"	m	1	1	2	1	"	1 75 "
Carver	37	Michigan	U. S.	m	1	0	0	1	"	15 00 w
"	17	Mass.	Holland	s	"	"	0	0	not answered	80 d
"	35	Holland	"	m	0	0	1	1	"	15 00 w
Machine hand	30	Canada	Canada	"	"	"	0	0	shut down	1 50 d
Packer	23	Ohio	Holland	m	1	0	2	1	no work	1 50 "
"	21	Michigan	U. S.	s	"	"	0	1	"	1 40 "
Machine hand	25	Holland	Holland	m	0	0	1	1	shut down	1 65 "
Shop boy	14	Michigan	"	s	"	"	0	0	first work	38 "
Machine hand	21	Holland	"	m	0	0	1	1	shut down	1 40 "
Mill hand	53	"	"	m	4	2	5	1	"	1 00 "
Finisher	35	New York	U. S.	s	"	"	0	0	"	1 40 "
"	29	Holland	Holland	s	"	"	0	0	"	1 25 "
Machine hand	15	"	"	s	"	"	0	1	injured hand	50 "
"	16	Michigan	"	s	"	"	0	0	"	70 "
Gluing and ven'g	33	Holland	"	m	5	3	6	1	shut down	1 50 "
Machine hand	16	Indiana	U. S.	s	"	"	0	0	"	4 00 w
"	20	Michigan	"	s	"	"	1	1	shut down	1 65 d
Helper in shop	17	Holland	Holland	s	"	"	0	0	"	87 "
Sander	14	Michigan	England	s	"	"	0	0	"	3 00 w
Varnisher	36	Holland	Holland	m	3	0	4	1	"	9 00 "
"	30	Iowa	U. S.	m	4	1	5	1	shut down	10 20 "
"	30	Michigan	"	m	1	0	2	1	no work	10 40 "
"	30	Holland	Holland	m	3	2	4	1	"	10 20 "
Machine hand	33	"	"	m	0	0	1	1	"	1 50 d
Packer	34	Canada	Canada	m	0	0	1	1	"	1 65 "
Carver	24	Germany	Germany	s	"	"	0	0	"	2 50 "
Packer	36	Michigan	U. S.	s	"	"	0	1	shut down	1 50 "
Carver	30	"	Holland	s	"	"	0	1	"	2 30 "
"	31	Germany	Germany	m	2	0	3	1	not answered	3 30 "
Machine hand	15	Michigan	Holland	s	"	"	0	1	no work	3 00 w
"	23	"	"	m	1	0	2	1	"	1 75 d
Cabinet-maker	18	"	"	s	"	"	0	1	no work	3 50 w
"	22	Holland	"	s	"	"	0	1	"	3 00 "
Varnisher	29	"	"	m	3	1	4	1	"	1 80 d

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
359	\$200	\$300	0	0	no		\$5 00	no	none		1						13
440	0	390	0	0	no	\$700	300	"	"		1	1					13
535		535	0	0	"			"	"		1	1	35 00				14
156			*	0	"			"	"				3 00				14
305				0	"			"	"								12
418	0		0	0	"			"	"		1		3 50				17
303	0		0	0	"			"	"				3 50				16
390		390	0	0	"		8 00	"	organ		1		*				17
399			*	0	"				none								14
535	0	535	0	0	1,400	475		yes	organ		1	1					15
468	0	468	0	0	no		6 00	"	none			1					12
195			*	0	"				no				*				14
505	100	505	0	0	"		5 00	yes	"		1sw						15
468	0	300	25	0	1,400	450		yes	"		1						12
468	50	300	25	0	1,500	800		no	"			1					12
548	15	375	0	0	675	675		yes	"		1sw						12
390	0	390	0	0	900	125		"	"		1						14
373	20	375	0	0	no		4 00	"	"		1sw						13
357	0	357	0	0	500	300		"	"		1						12
437	0		*	0	no			no	"		2sw		*				14
546	0	400	0	0	2,200	800		yes	organ		1	1					14
780		450	* 75	0	no		6 00	no	none				*		1	\$5 00	11
140			*	0	"			"	"								13
780		360	0	0	"			"	"		1						12
448	0		0	0	"			"	"			1	4 00				21
448		450	0	0	"		4 50	yes	"		1	1					15
394			0	0	"			no	"				3 50				14
493		495	0	0	"		5 00	yes	"				*				12
36			*	0	"			no	"								14
406		406	0	0	"		5 00	"	"								12
396	250	450	0	0	1,300	400		yes	organ			1					16
437			0	0	no			no	none		1	1	3 50				14
390	0		0	0	"			"	"				3 00				11
143			*	0	"			"	"				*				14
218			*	0	"			"	"								13
468	0	467	0	0	"			yes	organ			1					12
303			0	0	"			no	none				2 50				14
504		195	0	0	"			"	"				4 50				13
195			0	0	"			"	"			1	2 00				8
156			*	0	"			"	"				*				13
499		499	0	0	800	400		yes	"			1					12
442		442	0	0	1,000	500		"	"								19
450		540	0	0	no			no	"		1		9 00				12
464	0	530	0	0	800	400		yes	"		1						9
468		468	0	0	no		5 00	"	"								15
514		514	0	0	"		8 00	"	"		1	1	1				16
780	0		0	0	"			no	"				3 50		1	5 00	15
458			0	0	"			"	"		1		3 50				12
1,022			0	0	"		8 00	"	"		1	2	4 00		1	5 00	14
665		622	0	0	"			"	"								15
143			*	0	"			"	"				*				14
546		580	0	0	"		7 00	yes	"		1			100			16
152			0	0	"			no	"								14
391			0	0	"			"	"				3 00				14
515		515	0	0	"		7 00	yes	"			1					16

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$448		\$450	0	0	\$1,300	\$500	yes	organ	none		1		\$3 00				16
390	0		*	0	no		no	no			1		*				14
225				0	"		"	"	"								14
643				0	"		"	"	"	1	1		4 00				14
535	0		\$175	\$700	"		"	"	"		1	1	3 88	\$100	2	\$10 00	15
437			0	0	"		"	"	"	1	2		3 50		1	5 00	14
390	\$15			0	"		"	"	piccolo	1	3	1	4 00				15
19			*	0	"		"	"	none	1			*				14
234				0	"		"	"	"								14
550		\$80	0	0	700	450	yes	"	"								15
439			0	0	no		no	no	"		1		3 50				13
459	0	459	0	0	1,000	500	yes	"	"		1						13
390	0		0	0	no		no	no	"				3 00				14
259			0	0	"		"	"	"				3 00				13
611			0	0	"		"	"	"		2		4 00				9
630	0	513	0	0	500	250	yes	"	"		1						15
351			0	0	no		no	no	"				4 00	2,000			15
407			*	0	0		"	"	"				*				14
394	0	394	0	150	"		yes	"	"								14
439	0	439	0	0	600	300	yes	"	"		1						14
345			0	0	no		no	no	"				3 00				13
416			0	0	"		"	"	"				4 00		1	5 00	16
500	30	375	0	0	800	400	yes	"	"				*				17
73			*	0	no		no	no	"								14
104				0	"		"	"	"								15
280		280	0	0	"		yes	"	"	1							15
437			0	0	"		no	no	"				7 00				9
477		365	0	0	1,500	750	yes	"	"		1			1,000			13
429		429	0	0	no		7 00	"	"								16
780		365	0	0	"		9 00	"	"						1	5 00	16
616		616	0	0	"		5 00	"	"	1							20
65			*	0	"		"	no	"				*				13
986		600	0	0	"		8 00	yes	"	1				2,500	3	10 00	13
500		365	0	0	1,200	650	"	"	organ		1						18
598		598	0	0	no		8 00	no	none				*				15
241			*	0	no			no	none								15
390		390	0	0	"		5 00	yes	"						1	5 00	13
512			0	0	"			no	"				3 50		1	5 00	15
595			0	0	"			"	"				4 00				13
353		353	0	0	"		4 50	yes	"	1					1	5 00	13
397		390	0	0	"		9 00	"	"	1					2	10 00	14
400	80		0	0	"			no	"	1	2		3 50		1	5 00	14
572		450	0	0	"		7 00	yes	"		1				1	5 00	13
357		357	0	0	"		6 00	no	"						1	5 00	16
832		600	0	0	"		6 00	yes	organ		1				2	10 00	14
832		832	0	0	"		6 00	"	"		2				2	10 00	10
859		500	0	0	1,200	300	"	"	none	1				1,000	1	5 00	11
312	300		0	0	no			no	"				4 00				14
520			0	0	"			"	"				4 00				16
530		400	0	0	1,400		yes	organ	none		1						13
500	0	365	0	0	1,000	300		no	none		1						11

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
8546			0	no			no	none		\$4 50				18
886	\$500		0	\$2,000	\$1,000		yes	"	1		\$2,000		\$10 00	18
811	100		0	no			no	"		8 00			15 00	9
384			0	1,500			yes	"	1					14
382			0	no			no	"		+				14
932			0	2,500			yes	piano	1		3,000	1	15 00	18
448			0	no		\$5 00	no	none				1	5 00	14
818			0	900		5 00	"	"	2		1,000	1	5 00	10
548			0	1,500			"	"				1	5 00	15
390	0		0	800	550		"	"				1	5 00	12
390			0	1,200	600		yes	"				1	8 00	12
648			0	no		5 00	"	"				1	5 00	12
684	145		0	750	100		"	"	1			1	5 00	15
409			0	no		4 00	no	"				1	5 00	12
880			0	"		5 00	yes	"	1			1	5 00	13
385	0		0	"		4 00	no	"				1	5 00	13
433			0	"		7 50	"	"	1			1	5 00	19
520			0	"			"	"		8 50		1	5 00	18
280			0	"			"	"		8 50		1	5 00	25
308			0	"			"	"		+				14
380	20		0	"			"	"		+				14
488			0	"		9 00	"	"	1					21
624			0	"		8 00	"	"	1					19
712			0	"		8 00	yes	organ	1		64	1	5 00	12
702			0	750	450		"	none	1			2	5 00	20
836	0		0	no		10 00	no	"				3	14 00	10
634			0	"		8 00	yes	"	1			1	5 00	12
622			0	"		12 00	"	"	1		2,250	1	5 00	14
325			0	"		6 00	no	"				1	5 00	18
234			0	"			"	"		+				14
380	200	300	0	2,000	300		"	"						12
841			0	no			"	"		8 50				18
420			0	"			"	cornet	1	4 00				18
684			0	"			"	none		8 50				18
428	100	358	0	"		5 00	yes	"	1			1	5 00	14
380	0	300	0	500	300		"	"				1	8 00	14
936		936	0	no		11 00	"	"			500	1	5 00	14
598	0	500	0	"		15 00	no	"				1	5 00	15
455			0	"			"	"		4 00		1	5 00	15
258			0	"			"	"		+		1	5 00	9
455			0	"			"	"		4 00		1	5 00	18
453		565	0	600	300		yes	"						18
762	1,800	762	\$400	no		15 00	"	"	1		1,000	1	5 00	12
912			0	"			no	"		4 50				15
426		426	0	1,400			yes	organ	1					14
358	500	200	0	no		5 00	"	none						14
380	0	250	0	1,000	750		no	"				1	5 00	12
1,002		600	350	no		8 00	yes	"	1		500	1	5 00	14
382	0		0	"			no	"		8 50				14
881	400	881	0	3,000	850		yes	"	1		2,000	3	10 00	17
124			0	no			no	"		+				11
851	0		0	"			"	"		4 00		2	10 00	14
886	87		0	"			"	"		8 50		1	5 00	16
429	50		0	"			"	"		8 50		1	5 00	12
512		512	0	"		6 00	"	"				2	10 00	24

* Gives wages to parents and lives at home.

+ Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Machine hand	28	Holland	Holland	s	0	12	X	10	12	sickness	\$1 50 d
"	25	N Jersey	"	s	0	10	X	12	12	"	2 25 "
Laborer	47	Ohio	U. S.	n	4	3	1	10	52	sickness	1 25 "
Machine hand	20	Canada	Ireland	s	0	3	1	10	52	no work	1 50 "
"	22	Michigan	U. S.	n	2	9	X	11	6	shut down	1 75 "
Laborer	48	Holland	Holland	w	4	X	X	12	...	no work	1 25 "
"	32	Germany	Germany	n	4	X	X	10	30	"	1 25 "
Molder	30	U. S.	England	n	1	16	2	10	52	sickness & no w'rk	17 50 w
Varnisher	42	Holland	Holland	n	1	4	8m	10	39	no work	1 25 d
"	17	U. S.	U. S.	s	0	8m	8m	11	19	"	5 00 w
Finisher	18	Germany	Germany	s	0	2	X	11	13	"	5 00 "
Sand-paperer	15	U. S.	Holland	s	0	1m	1m	9	72	"	4 50 "
Dopper	23	"	U. S.	s	0	8	X	11	26	"	1 25 d
Cabinet-maker	32	Holland	Holland	n	1	17	X	11	13	"	1 50 "
Machine hand	33	U. S.	U. S.	n	4	15	1	11	20	"	1 75 "
"	23	"	"	n	2	14	1	11	26	"	1 75 "
Cabinet-maker	46	Germany	Germany	n	4	2	X	12	...	"	1 50 "
Ass't ship. clerk	22	U. S.	U. S.	s	0	3	1	12	...	"	1 50 "
Machine hand	32	"	"	n	2	9	X	11	13	no work	1 75 "
Finisher	21	"	"	s	0	4	X	12	...	"	1 25 "
Molder	29	"	Germany	s	0	9	2	12	...	"	15 00 w
Round-worker	43	Prussia	Poland	n	6	16	8m	12	...	"	1 25 d
Foreman	40	Scotland	Scotland	n	8	24	X	11	26	no work	8 00 "
Molder	29	U. S.	U. S.	n	3	12	2	12	...	"	16 00 w
Cabinet-maker	56	Germany	Germany	n	2	18	1	10	52	no work	1 75 d
Machine hand	41	U. S.	U. S.	n	3	8	4m	7	124	accident	1 50 "
Laborer	18	Holland	Holland	s	0	1	X	11	12	no work	2 80 w
Cabinet-maker	30	Germany	Germany	n	3	16	X	11	26	sickness	1 50 d
"	45	Russia	Poland	n	2	32	8m	10	52	no work	1 75 "
KENT FURNITURE MANUF'G CO.											
Shipping clerk	35	Ireland	Ireland	s	1	9	9	12	...	"	2 00 "
Sand-paperer	22	Russia	Russia	s	0	1	1	12	...	"	1 00 "
Varnisher	18	"	"	s	0	1	8m	12	...	"	1 00 "
Sand-paperer	36	"	"	n	2	2	2	12	...	"	1 00 "
"	30	Germany	Germany	n	2	5	5	12	...	"	1 25 "
Rubber	34	Holland	Holland	n	5	4	7	11	12	no work	10 00 w
Filler	52	Germany	Germany	n	2	2	2	12	...	"	1 25 d
Varnisher	30	Holland	Holland	n	2	4	2	12	...	"	1 75 "
Rubber	44	"	"	n	1	8	4	12	...	"	9 00 w
Varnisher	19	U. S.	U. S.	s	0	1	1	12	...	"	1 00 d
Sand-paperer	28	Russia	Russia	n	1	X	X	12	...	"	1 00 "
Stock man	39	Germany	Germany	n	6	4	4	11	6	no work	8 25 w
Polisher	31	Holland	Holland	n	4	4	5	12	...	"	1 50 d
Round-worker	30	Germany	Germany	n	2	7	7	11	12	no work	1 50 "
"	32	"	"	n	4	6	6	12	...	"	1 50 "
Varnisher	17	Prussia	Poland	s	0	X	X	12	...	"	1 00 "
"	17	Russia	Russia	s	0	4	4	12	...	"	1 00 "
"	30	U. S.	England	n	1	1	1	12	...	"	8 25 w
Filler	45	Holland	Holland	n	5	8	1	12	...	"	1 25 d
"	28	"	"	n	2	1	1	12	...	"	8 00 w
Sand-paperer	15	"	"	s	0	1	1	12	...	"	4 00 "
Machine-hand	33	U. S.	"	s	0	5	1	11	26	no work	2 00 d
Filler	10	Holland	"	n	5	1	1	12	...	"	1 25 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$380	0	.....	0	0	no	.....	.....	no	none	1	4	.....	\$4 00	.....	2	\$15 00	16
702	.....	.....	\$100	\$750	no	.....	.....	yes	organ	.....	1	.....	4 50	.....	1	5 00	12
825	.....	\$325	0	0	\$1,280	\$500	.....	no	none	.....	.....	.....	.....	.....	1	5 00	15
380	0	.....	0	100	no	.....	\$4 25	.....	piano	1	.....	.....	3 50	\$2,250	1	10 00	14
556	.....	350	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
390	\$7	285	50	0	600	300	.....	yes	none	.....	1	.....	.....	.....	.....	.....	8
341	0	280	0	0	no	.....	3 50	no	.....	.....	.....	.....	.....	.....	.....	.....	14
758	.....	758	0	0	no	.....	.....	no	.....	1	.....	.....	8 50	.....	2	10 00	14
341	0	300	0	0	600	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
244	.....	.....	*	0	no	.....	.....	.....	accord'n	.....	.....	.....	*	.....	.....	.....	14
249	.....	.....	*	0	.....	.....	.....	.....	none	.....	.....	.....	*	.....	.....	.....	14
180	.....	.....	.....	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
357	.....	.....	0	0	.....	.....	.....	yes	.....	1	.....	.....	3 25	.....	.....	.....	15
448	0	400	0	0	800	200	.....	.....	.....	1	1	.....	.....	.....	1	5 00	14
500	.....	350	0	0	no	.....	9 00	yes	.....	.....	.....	.....	.....	.....	1	5 00	14
500	.....	450	0	0	.....	.....	6 00	no	.....	.....	.....	.....	.....	.....	.....	.....	15
468	500	400	0	0	800	400	.....	yes	.....	.....	1	.....	.....	.....	.....	.....	19
468	.....	400	0	0	no	.....	.....	no	.....	.....	.....	.....	3 50	.....	.....	.....	14
528	.....	450	0	0	.....	.....	6 00	no	.....	.....	.....	.....	.....	.....	1	5 00	12
880	.....	.....	*	0	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	1	5 00	14
780	.....	.....	0	60	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	2	10 00	16
490	0	350	0	0	900	800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
838	0	700	0	0	1,800	400	.....	yes	.....	1	1	.....	.....	2,000	1	5 00	16
938	0	900	100	100	900	400	.....	.....	.....	1	.....	.....	.....	.....	2	10 00	14
455	0	400	0	0	no	.....	4 00	no	.....	.....	1	.....	.....	.....	1	5 00	14
283	.....	450	0	0	.....	.....	7 00	yes	.....	.....	.....	.....	.....	.....	1	5 00	14
189	0	.....	*	0	.....	.....	.....	no	.....	.....	.....	.....	*	.....	.....	.....	14
429	0	400	0	0	.....	.....	5 00	yes	.....	.....	.....	.....	.....	.....	.....	.....	14
455	0	400	0	0	700	350	.....	.....	.....	.....	1	.....	.....	.....	1	3 00	13
624	1,500	.....	200	600	2,000	.....	.....	no	.....	.....	.....	.....	8 00	.....	.....	.....	14
312	0	.....	25	0	no	.....	.....	.....	.....	.....	.....	.....	8 00	.....	.....	.....	12
312	0	.....	0	0	.....	.....	.....	.....	.....	.....	.....	.....	8 50	.....	.....	.....	14
312	0	800	0	0	.....	.....	5 00	.....	.....	.....	1	.....	.....	.....	.....	.....	12
390	0	350	0	0	325	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
498	0	450	0	0	no	.....	7 00	.....	.....	1	1	.....	.....	.....	.....	.....	13
390	0	350	0	0	.....	.....	3 00	.....	.....	.....	.....	.....	.....	.....	1	3 00	13
546	0	500	25	175	.....	.....	6 00	.....	.....	1	.....	.....	.....	.....	.....	.....	13
468	0	400	50	0	500	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	14
312	.....	.....	0	0	no	.....	.....	.....	.....	.....	.....	.....	8 00	.....	.....	.....	14
312	0	800	0	0	.....	.....	4 00	.....	.....	.....	1	.....	.....	.....	.....	.....	12
420	0	400	0	0	600	400	.....	.....	.....	.....	.....	.....	.....	.....	1	5 00	13
468	0	400	50	0	1,000	700	.....	yes	.....	.....	1	.....	.....	.....	.....	.....	14
448	40	400	0	0	1,000	400	.....	no	.....	.....	1	.....	.....	.....	1	5 00	14
468	0	400	25	0	700	300	.....	yes	.....	.....	1	.....	.....	.....	1	5 00	14
312	.....	.....	0	0	no	.....	.....	no	.....	.....	1	.....	4 50	.....	.....	.....	12
312	.....	.....	*	0	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....	12
429	.....	280	150	0	2,000	700	.....	yes	organ	1	1	.....	.....	.....	.....	.....	13
640	0	500	100	0	no	.....	7 00	.....	none	.....	1	.....	.....	.....	.....	.....	12
418	0	400	0	0	.....	.....	5 50	no	.....	.....	1	.....	.....	.....	.....	.....	12
208	.....	.....	*	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
578	.....	.....	200	75	.....	.....	.....	.....	.....	1	.....	.....	8 50	.....	.....	.....	14
440	0	400	40	0	.....	.....	5 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	12

* Gives wages to parents and lives at home.

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	Wages received.
Filler.....	48	Holland.....	Holland.....	w'r	31 25 d
Machine-hand.....	17	U. S.....	U. S.....	s	5 00 w
Filler.....	64	Holland.....	Holland.....	m	1 25 d
".....	59	Germany.....	Germany.....	m	1 25 "d
Finisher.....	34	U. S.....	Wales.....	s	7 00 w
Filler.....	47	Holland.....	Holland.....	m	1 25 d
Teamster.....	30	Canada.....	Ireland.....	s	1 25 "d
Packer.....	15	U. S.....	U. S.....	s	4 00 w
Turner.....	50	".....	".....	m	12 00 "w
Trimmer.....	24	Canada.....	Canada.....	m	1 50 d
".....	23	U. S.....	Holland.....	s	1 25 "
Machinist.....	42	".....	Germany.....	m	1 75 "d
Packer.....	63	".....	U. S.....	m	1 25 "
Machine-hand.....	20	Holland.....	Holland.....	s	1 25 "
Gluer.....	36	".....	".....	m	1 62 "
Round-worker.....	30	".....	".....	m	1 25 "
Machine-hand.....	18	".....	".....	s	3 50 w
Laborer.....	28	Canada.....	U. S.....	s	7 50 "d
Cabinet-maker.....	26	Indiana.....	".....	s	7 00 "
Finisher.....	25	".....	".....	m	10 50 "
Machine-hand.....	15	Holland.....	Holland.....	s	4 00 "
".....	16	".....	".....	s	3 50 "
".....	30	".....	".....	s	8 25 "d
".....	31	Wisconsin.....	U. S.....	m	1 25 d
Cabinet-maker.....	28	Germany.....	Germany.....	s	1 75 "
".....	32	".....	".....	m	10 50 w
".....	16	Holland.....	Holland.....	s	3 50 "d
".....	23	".....	".....	m	1 50 d
Machine-hand.....	33	".....	".....	m	2 25 "w
Cabinet-maker.....	28	".....	".....	m	12 00 w
Machine-hand.....	16	".....	".....	s	3 50 "
".....	15	".....	".....	s	3 50 "
Finisher.....	36	".....	".....	m	1 25 d
Machine-hand.....	38	".....	".....	m	1 50 "d
Finisher.....	44	".....	".....	m	1 25 "
".....	45	".....	".....	m	1 25 "
Cabinet-maker.....	30	".....	".....	m	10 00 w
Laborer.....	27	".....	".....	m	1 25 d
Finisher.....	24	Illinois.....	U. S.....	m	1 25 "d
".....	25	Holland.....	Holland.....	m	1 25 "
".....	36	".....	".....	m	1 50 "
Stock-keeper.....	53	Penn.....	U. S.....	m	1 50 "
Packer.....	20	Michigan.....	".....	s	1 25 "d
Finisher.....	53	Holland.....	Holland.....	m	7 00 w
".....	19	Michigan.....	England.....	s	7 00 "d
Laborer.....	43	Ohio.....	U. S.....	m	6 25 "
Car loader.....	22	Indiana.....	".....	m	1 50 d
".....	19	Michigan.....	Germany.....	s	1 25 "d
Glass-fitter.....	30	New York.....	U. S.....	m	2 00 "
Filler.....	19	Penn.....	Germany.....	s	1 00 "
Finisher.....	19	Austria.....	Austria.....	s	10 00 w
".....	29	Russia.....	Poland.....	s	1 25 d
".....	23	Holland.....	Holland.....	s	10 00 w
".....	37	Poland.....	Poland.....	m	1 25 d
".....	28	Germany.....	Germany.....	s	1 50 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
3390	0		0	0	no			no	none						13
280			\$25	\$50	no			no	"						10
390	0	\$300	50	0	\$600	\$550		"	"						13
540	0	425	50	0	2,000			"	"						12
364			0	0	no			"	"						14
690	\$100	600	0	0	"		\$6 00	"	"						15
292		292	0	0	"		5 00	"	"						12
191			87	0	"			"	"						14
598		450	100	0	"		6 00	yes	organ						14
429	0	400	0	0	"		6 00	no	none	1					17
366			0	0	"			"	"						14
646		600	0	0	"		7 00	yes	organ						12
357		300	0	0	1,500			"	"	1					12
357	0	*	0	0	no			no	none						11
507	0	450	0	0	800	600		yes	"	1					13
375	0	350	0	0	no		6 00	"	"						13
45		*	0	0	"			no	"						13
390		380	0	0	"		5 00	yes	melod'n						12
182		380	0	0	"		6 00	no	none						15
478		478	0	0	"		14 00	yes	"	1					16
195			*	0	"			no	"						12
174			*	0	"			"	"						14
411			*	0	"			"	"						12
374		300	0	0	"		6 50	yes	"						10
546			0	0	"			no	"						10
523	60	385	150	0	1,000	500		yes	"	2					15
179		*	0	0	no			no	"						13
390		390	0	0	"		6 00	yes	"	1					14
673		400	100	0	900	870		"	"	1					15
498		400	0	0	700	200		"	"	1					18
174	0		*	0	no			no	"						14
91	0		*	0	"			"	"						14
374	50	385	0	0	300			"	"	1					12
429	8	429	0	0	no		6 50	yes	"						15
357	0	357	0	0	1,000	475		"	"	1					12
574	16	450	0	0	800	300		"	"	1					14
498		423	75	100	1,400	300		"	"	1					14
341	0	225	25	0	no		6 00	no	"	1					11
390		240	0	0	"		6 00	yes	"	1					17
374	0	374	0	0	"		4 50	"	"	1					12
444	2	429	0	0	"		4 00	"	"	1					13
448		225	0	0	"		10 00	no	"	1					18
357		100	0	0	"			"	"						18
306	0	300	0	0	"		5 00	"	"	1					14
364		*	0	0	"			"	"						16
411		350	0	0	"		6 00	"	"	1					13
429		275	50	0	"		5 00	"	"	1					14
292			0	0	"			"	"						14
772		500	72	200	2,500	800		yes	"	1					17
306			0	0	no			no	"						13
487	0	*	0	0	"			"	"						10
357	300		0	0	"			"	"						14
347	0	487	0	0	"			"	"						16
357	600	357	0	0	3,500			"	"						14
448	0	365	0	0	no		5 00	yes	organ	1					9

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Finisher.....	27	Holland..	Holland..	s	..	..	0	7	4	10	52	no work	\$1 50 d
Elevator man....	35	Germany..	Germany..	m	3	..	3	8	3	11½	19	shut down	8 25 w
Cabinet-maker....	29	Holland..	Holland..	m	3	..	4	8	4	11	28	no work	10 10 "
" ".....	32	Prussia..	Poland..	m	4	..	2	45	2½	11½	19	"	7 20 "
" ".....	28	Holland..	Holland..	m	3	..	4	10	3	11½	19	"	8 00 d
Sand-paperer....	18	"	"	s	..	..	0	2	1	11½	18	"	5 00 w
Machine hand....	22	"	"	m	1	..	2	9	5	10	52	"	1 75 d
Cabinet-maker....	30	"	"	m	0	..	1	12	10w	10	52	"	1 25 "
Carver.....	36	U. S.....	England..	m	1	..	6	20	½	12	..	..	8 30 "
Sand-paperer....	31	Holland..	Holland..	s	..	..	1	2m	2m	12	..	..	1 00 "
" ".....	40	"	"	m	..	..	3	2	2	11½	18	no work	1 25 "
Cabinet-maker....	27	Germany..	Germany..	s	..	..	0	2	2	12	..	..	1 50 "
Carver.....	35	Russia..	Russia..	s	..	..	0	3	8	10	52	no work	8 00 w
" ".....	16	U. S.....	U. S.....	s	..	..	0	1½	1½	12	..	..	8 00 "
" ".....	17	"	"	s	..	..	0	3	2m	12	..	..	1 25 d
Cabinet-maker....	33	Russia..	Russia..	s	..	..	0	4	4	10	52	no work	1 25 "
" ".....	24	Holland..	Holland..	m	0	..	1	6½	6½	11½	13	"	1 62 "
" ".....	23	"	"	m	0	..	1	4	8	11½	13	"	1 50 "
WM. A. BERKEY FURNITURE CO.													
Filler.....	17	Canada..	Canada..	s	..	..	n	4w	4	..	..	first wrk in U.S.	7 50 w
Trucker.....	20	"	"	s	..	..	n	2m	3	234	..	no work	1 25 d
Packer.....	24	Mo.....	U. S.....	m	1	..	9	11½	19	..	..	"	1 75 "
Cabinet-maker....	26	Holland..	Holland..	m	2	..	8½	11	11	26	..	"	1 75 "
Carver.....	35	England..	England..	m	2	..	..	2m	8	104	..	"	3 30 "
Packer.....	42	Scotland..	Scotland..	m	0	..	..	½	7	130	..	"	1 50 "
Finisher.....	25	Ohio.....	U. S.....	s	..	..	..	½	12	..	..	"	1 50 "
Machine-carver..	25	Canada..	Canada..	s	..	..	n	2m	11	20	..	no work	1 50 "
Miller, stainer..	38	Holland..	Holland..	m	1	..	2	8	8	104	..	"	1 25 "
Finisher.....	24	Michigan..	U. S.....	s	..	..	..	5	12	..	..	"	1 85 "
Filler.....	28	Holland..	Holland..	s	..	..	n	10m	11½	13	..	no work	1 25 "
Machine hand....	32	Canada..	Canada..	m	1	..	4	12	12	..	..	"	2 25 "
Cabinet-maker....	22	Holland..	Holland..	s	..	..	..	3	12	..	..	"	1 50 "
Machine hand....	31	Germany..	Germany..	m	0	..	..	4	11½	18	..	no work	2 25 "
Filler.....	23	New York..	U. S.....	s	..	..	..	4	12	..	..	"	1 25 "
Carver.....	25	Ohio.....	"	s	..	..	..	2m	8	104	..	dull season	3 30 "
Cabinet-maker....	23	Holland..	Holland..	m	3	..	7	10	10	62	..	sickness	2 25 "
Trimmer.....	32	Michigan..	Ireland..	m	0	..	4	12	12	..	..	"	1 85 "
Cabinet-maker....	28	New York..	U. S.....	s	..	..	..	8	8	104	..	no work	2 25 "
Carver.....	50	Germany..	Germany..	wr	0	..	..	1m	8	104	..	"	3 30 "
Trimmer.....	25	Michigan..	U. S.....	s	..	..	..	5	11½	18	..	"	2 25 "
Cabinet-maker....	37	Holland..	Holland..	m	5	..	2	10	10	52	..	dull season	1 75 "
Sand-paperer....	17	Michigan..	U. S.....	s	..	..	..	1	11½	19	..	no work	4 50 w
" ".....	18	Holland..	Holland..	s	..	..	n	6m	6	..	..	first wrk in U.S.	4 50 "
Machine hand....	18	"	"	s	..	..	..	1	12	..	..	"	85 d
Cabinet-maker....	27	"	"	s	..	..	..	2	11	20	..	no work	1 75 "
Finisher.....	2	"	"	s	..	..	..	3	12	..	..	"	1 50 "
Filler.....	19	Michigan..	Canada..	s	..	..	..	2½	12	..	..	"	1 25 "
Dauber.....	44	Poland..	Poland..	m	4	..	..	1	11½	18	..	no work	1 25 "
Machine hand....	21	Holland..	Holland..	s	..	..	..	7	11½	19	..	"	1 50 "
Fireman.....	23	Indiana..	U. S.....	m	1	0	..	4	12	..	..	"	10 00 w
Cabinet-maker....	37	Germany..	Germany..	m	1	0	..	4	10	52	..	no work	9 50 "
" ".....	19	Holland..	Holland..	s	..	..	..	2	11	26	..	"	8 00 "
Trucker.....	25	Canada..	Canada..	s	..	..	..	½	9	..	..	not in U. S.	1 25 d

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
339	0		0	0	no			no	none		\$4 00				14
402	0	\$385	\$37	0	no		\$4 00	no							19
477		425	40	0	\$970	\$200	yes	yes							15
441	\$90	400	1	0	1,400	600				2					17
598		500	8	0	900	250									12
219			*	0	no			no							12
455		400	0	0	1,000	300				1					13
535	20	800	0	0	no		5 50								16
1,029		1,029	0	0	no		15 00		piano	3	3 25				18
312			0	0	"				none						12
374	0	350	0	0	"		3 00								10
480	30		25	25	"						3 25				14
347	0		0	0	"						5 00				13
156			*	0	"						*				14
390			*	0	"						*				14
325	0		0	0	"					1	4 00				13
480		400	0	0	"		4 00								11
448		400	0	0	750	715									12
130			0	0	no			"	"		3 50				12
97	0		0	0	no			"	"	1	3 50				13
511		312	150	150	"		4 00	"	"	1					13
500		312	0	0	1,300	650		yes	"	1					14
680	5	343	0	0	900	200		"	"	2	2				16
273	5	273	0	0	no			"	"	1					16
468			0	0	"			no	"	1	4 00				14
429			0	0	"			"	"	1	4 50				18
260	0	312	0	0	"		5 00	"	"						14
577			0	0	"			"	"	1	4 00				11
373			0	0	"			"	"		3 50				22
702		702	0	0	"		10 00	yes	"	1			1	5 00	14
468			*	0	"			no	"	1	*	\$150			10
672		300	0	0	"		8 00	"	"	1		2,000	2	9 00	14
390			0	0	"			"	"		3 75				16
698			0	0	"			"	"	1	5 00		1	5 00	15
545		585	0	0	670	125		yes	"	1					14
577		500	0	50	no			no	"	1	3 00				16
488			0	0	"			no	"	1	0 00		1	5 00	18
688			0	0	"			"	"	1	4 00				15
672			0	0	"			"	"	1	4 50		1	5 00	17
455	0	455	0	0	800	400		yes	"	2					14
219			*	0	no			no	"		*				12
117	0		*	0	"			"	"		*				14
208			*	0	"			"	"		*				8
500			0	0	"			"	"	1					15
488	0		0	0	"			"	"		3 50				12
390			0	0	"			"	"						14
373	0	312	0	0	"		8 00	yes	"						11
447	0		0	0	"			no	"						11
520	0	300	0	0	"		6 00	yes	"	1					15
411	0	411	0	0	800	400		"	"						14
381			*	0	no			no	"		*				12
292	0		0	0	"			"	"		3 50				12

* Gives wages to parents and lives at home.

TABLE No 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	Cause for loss of time.	Wages received.
Finisher.....	24	Canada.....	Canada.....	s	0	0	0	5	no work	\$1 35 d
Cabinet-maker.....	25	Germany.....	Germany.....	m	0	0	0	0	no work	1 75 "
Machine hand.....	23	Michigan.....	U. S.....	m	0	0	1	7	no work	1 75 "
Gluer.....	53	N. H.....	U. S.....	m	0	0	0	0	no work	2 00 "
Laborer.....	27	Holland.....	Holland.....	m	1	0	0	0	"	1 25 "
".....	38	".....	Holland.....	s	0	0	0	5	"	1 50 "
Machine hand.....	31	Michigan.....	Scotland.....	m	2	1	4	4	"	9 00 w
Rubber.....	26	Holland.....	Holland.....	m	1	1	2	2	"	9 00 "
Engineer.....	31	Michigan.....	U. S.....	m	1	1	2	12	"	2 50 d
Saw filer.....	35	New York.....	Ireland.....	m	3	2	6	5	vacation	2 25 "
Turner.....	34	Michigan.....	Germany.....	m	1	1	3	16	"	2 50 "
".....	24	Denmark.....	Denmark.....	m	0	0	1	5	no work	2 25 "
Marker.....	31	Michigan.....	U. S.....	s	0	0	0	4	vacation	1 50 "
Cabinet-maker.....	34	Denmark.....	Denmark.....	m	2	2	4	16	shut down	2 25 "
Machine hand.....	29	Holland.....	Holland.....	m	1	1	2	11	kn's & no wrk	2 50 "
Foreman.....	31	Penn.....	Ireland.....	m	1	1	3	9	shut down	2 25 "
Varnisher.....	16	Michigan.....	Holland.....	s	0	0	0	1	no work	3 50 w
Sand-paperer.....	16	Holland.....	".....	s	0	0	0	5w	"	8 00 "
Carver.....	39	Germany.....	Germany.....	m	2	2	4	25	"	3 50 d
Sander.....	15	Holland.....	Holland.....	s	0	0	0	2m	sickness	3 00 w
Carver.....	3	ny.....	Germany.....	m	1	0	2	17	no work	8 30 d
Machine hand.....	17	ork.....	France.....	s	0	0	0	3	ot answered	4 50 w
Polisher.....	2	id.....	Holland.....	s	0	0	0	5	no work	1 50 d
Oil finisher.....	6	y.....	Norway.....	w'r	3	0	0	9	"	1 50 "
Finisher.....	11	ny.....	Poland.....	s	0	0	0	5w	ot answered	4 50 w
Carver.....	9	".....	Ireland.....	m	0	0	1	10	kn's & no wrk	18 00 "
Cabinet-maker.....	4	id.....	Holland.....	m	6	1	7	23	no work	1 75 d
Carver.....	11	an.....	".....	s	0	0	0	5	"	4 00 w
Machine hand.....	2	id.....	".....	s	0	0	0	10	"	1 75 d
Cabinet-maker.....	5	nd.....	England.....	m	7	1	4	30	"	3 25 "
Lumb'r inspect'r.....	33	Ohio.....	Germany.....	s	0	0	0	10	sickness	2 75 "
Oil finisher.....	23	Holland.....	Holland.....	m	2	0	3	9	"	9 00 w
Oil rubber.....	34	Michigan.....	U. S.....	m	1	0	2	7	kn's & no wrk	1 50 d
Finisher.....	16	".....	Holland.....	s	0	0	0	3	sickness	4 50 w
Varnisher.....	23	Holland.....	".....	s	0	0	0	8	no work	1 50 d
General helper.....	15	Michigan.....	U. S.....	s	0	0	0	3	kn's & no wrk	4 50 w
Cabinet-maker.....	19	".....	Holland.....	s	0	0	0	4	no work	1 25 d
Finisher.....	37	Holland.....	".....	m	1	0	2	3	"	9 00 w
".....	25	".....	".....	s	0	0	1	1	"	1 25 d
".....	44	".....	".....	m	0	0	4	3	"	1 35 "
".....	20	".....	".....	m	2	0	3	9	"	10 20 w
Carver.....	23	Germany.....	Germany.....	s	0	0	0	4	sickness	18 00 "
Cabinet-maker.....	23	Holland.....	Holland.....	m	8	0	4	8	no work	11 00 "
Packer.....	19	Michigan.....	U. S.....	s	0	0	0	23	"	1 50 d
Finisher.....	30	Russia.....	Russia.....	s	0	0	0	3	"	1 25 "
".....	43	Germany.....	Germany.....	m	7	0	8	13	"	1 50 "
".....	16	Michigan.....	U. S.....	s	0	0	0	23	"	75 "
".....	31	".....	".....	m	1	0	2	4	"	1 50 "
".....	28	New York.....	".....	m	1	0	2	1	"	9 00 w
Cabinet-maker.....	25	Michigan.....	Holland.....	s	0	0	0	7	"	1 75 d
".....	23	".....	".....	s	0	0	1	12	"	1 75 "
Carver.....	57	England.....	England.....	m	1	0	2	37	"	19 80 w
Cabinet-maker.....	17	Holland.....	Holland.....	s	0	0	0	4	"	1 00 d
".....	26	Michigan.....	".....	m	2	0	3	9	no work.	1 75 "
".....	34	New York.....	U. S.....	m	4	0	5	15	"	12 00 w

TABLE No. 1—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$390	0		0	0	no			no	none				\$3 50				13
455	0	\$290	0	0	"		\$8 50	yes	organ	1	3						14
546		312	0	0	"		6 00	no	none	1							15
646		362	0	0	\$1,600	\$300	6 00	yes	"	1	2			\$3,000			18
309		309	0	0	no			"	"								13
390	0		0	0	"			no	"				3 50				12
390		390	\$5	0	"		6 00	yes	"	2							12
390		390	0	0	"		5 00	"	"								14
780		700	80	0	2,500			"	piano								19
468		657	0	0	no		6 00	no	none	1				2,000	1	\$4 00	11
781		500	230	\$100	"			yes	piano	1	2	2				1 5 00	17
687		600	0	0	"		7 00	no	none	1	2	1				1 5 00	14
458			0	0	"			"	"	1	1		7 00				14
672	0	450	0	0	"		10 00	yes	"	1	2			2,000	1	5 00	14
650		450	100	0	1,800	650		"	organ	1							14
672		470	205	0	1,600	800		"	none	1							10
106			*	0	10	no		no	"				*				12
156	0		*	0	"			"	"				*				11
1,092	\$175	450	*	0	"		10 00	"	"	1	1	1					14
26				0	"			"	"				*				14
429	0	408	*	0	"			"	"		1		8 00		1	5 00	14
50			*	0	"			"	"				*				14
429	0		100	0	"			"	"				8 00				10
429	0	0	200	800	"			"	"	1			3 75		1	5 00	10
29			*	0	"			"	"				*				18
724		650	0	0	750			"	piano		1					1 5 00	16
455	0	800	*	0	700	500		yes	none				*				12
200			*	0	no			no	"				*				14
500			0	0	"			"	"				3 50				14
929	300	929	0	0	"		10 00	yes	piano	1							15
786			0	0	"			no	none	2			5 00				20
195	0	195	0	0	"		4 20	yes	"								12
429		429	0	0	"		8 00	"	"				*				12
220			*	0	15			no	"								14
390			50	0	"			"	organ		1		3 00				12
78			0	0	"			"	none				2 00				12
325			0	0	"			"	"				3 00				13
448	100	350	0	0	"		6 50	yes	"								16
357	0	100	100	0	"			no	"	law			3 00				9
386	0	386	0	0	"		5 00	yes	"								12
508	0	510	0	0	"		7 00	"	"	law							12
877	0		0	0	"			no	"	1			4 00		1	5 00	14
536		450	50	0	1,000	400		yes	organ	1	1						13
390			0	0	no			no	none	1	1	1	4 00		2	4 00	17
823	200		0	0	"			"	"				3 50				13
539	0	400	100	0	500		5 00	yes	"	law					1	2 50	13
175			*	0	no			no	"				*				14
312		312	0	0	"		6 00	"	"								9
429		300	0	0	"		7 00	yes	"								7
522			0	0	"			no	"	1			3 50				13
364			0	0	"			"	"				3 00		1	5 00	11
458	0	758	100	0	"			"	"		1		4 00	5,000	1	5 00	13
312			*	0	"			"	"				*				12
523		525	0	0	"		7 00	yes	"								15
624		500	0	0	1,200	450		"	"	1					1	5 00	15

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Cabinet-maker.	46	England	England	m	6	3	7	32	1	11	19	no work	\$12 00 w
Shop helper.	48	Holland	Holland	m	3	3	6	1	1	11	19	shut down	1 25 d
Machine hand.	55	New York	U. S.	m	2	1	2	1	1	11	26		1 75 "
	36	"	"	m	1	1	2	15	1	11	13	no work	2 50 "
Foreman.	28	"	"	m	0	0	0	7	7	12			3 50 "
Cabinet-maker.	42	Denmark	Denmark	m	7	3	4	6	1	10	52	no work	1 75 "
GRAND RAPIDS FURNITURE CO.													
Machine-hand.	15	Michigan	Holland	s			0	1	1	11	26	cut finger	3 00 w
Cabinet-maker.	21	Canada	Canada	s			0	3	2m	9	78	no work	1 00 d
	24	Michigan	Germany	m	0	0	1	8	6	11	13	vacation	1 50 "
Laborer.	33	Germany	"	m	6	8	7	6	6	12			1 25 "
Cabinet-maker.	16	Holland	Holland	s			0	2	2	12			3 50 w
Foreman.	26	"	"	w'r	1	0	2	7	7	12			9 00 "
Cabinet-maker.	20	"	"	m	2	0	3	6	6	12			1 25 d
Finisher.	24	Vermont	Canada	s			0	2					7 50 w
Cabinet-maker.	14	Michigan	Scotland	s			0	1	1	3		first work	2 00 "
Engineer.	26	England	England	m	0	0	1	6	5	11	18	vacation	2 00 d
Laborer.	25	Poland	Poland	s			0	2	2	12			6 75 w
Finisher.	14	Holland	Holland	s			0	1	1	12			3 00 "
"	23	Penn.	U. S.	m	0	0	1	7	2	8		vacation	8 25 "
"	25	England	England	s			0	4	8m	8	104	no wk & sickn'ss	8 25 "
"	22	Michigan	Germany	m	0	0	3	7	2m	4	206	no work	8 25 "
"	25	"	U. S.	m	2	0	3	2	9		78	"	8 25 "
Packer.	18	Holland	Holland	s			0	5m	5m	5		first wrk in U. S.	1 00 d
Machine-hand.	16	New York	U. S.	s			0	4m	4m				3 00 w
Laborer.	29	Poland	Poland	m	1	0	2	3	2	12			6 75 "
Machinist.	36	New York	U. S.	w'r	0	0	0	18	2	12			2 00 d
Teamster.	26	Holland	Holland	s			1	6	1	11	26	no work	6 75 w
Machine hand.	28	"	"	m	2	0	4	10	5	12			8 25 "
"	44	Ohio	U. S.	m	3	3	4	2	2	11	13	sickness	1 25 d
Cabinet.	15	Holland	Holland	s			0	6w	2	11	6	no work	3 50 w
Lumber-piler.	28	"	"	s			0	1	1	11	19	"	6 75 "
Machine hand.	14	U. S.	"	s			0	1	1	3		first work	3 00 "
Round-worker.	31	Holland	"	m	3	1	4	8	1	12			6 75 "
Shipping clerk.	37	Bermuda	Bermuda	m	0	0	1	2	5	11	6	no work	1 50 d
Machine hand.	42	Prussia	Poland	m	6	0	7	2	2	12			1 25 "
"	58	Holland	Holland	m	6	1	2	17	14	12			8 25 w
"	"	"	"	m	8	2	7	10	10	12			7 50 "
"	33	"	"	m	0	0	1	2	2	12			1 25 d
"	27	Prussia	Poland	m	2	0	3	6	2	12			1 50 "
Varnisher.	42	Holland	Holland	m	4	2	4	23	1	12			8 25 w
Machine hand.	16	"	"	s			0	1	1	12			3 00 "
Varnisher.	21	Germany	Germany	s			0	8	1	11	26	no work	8 25 w
Stainer.	53	Holland	Holland	m	2	0	2	3	3	12			1 25 d
Sand-paperer.	16	U. S.	"	s			0	1	1	12			3 00 w
Cabinet.	15	Holland	"	s			0	5m	1	10	52	sick and no w'rk	3 50 "
Sand-paperer.	14	U. S.	U. S.	s			0	2w	2w				3 00 "
Machine hand.	32	Holland	Holland	m	0	0	1	2	2	11	7	vacation	1 25 d
Packer.	50	Illinois	U. S.	s			0	1	1	10	52	accident	6 00 w
"	16	Penn	"	m	4	8	5	6w	6w	12			1 00 d
Finisher.	19	Poland	Poland	s			0	2w	1	10	39	vacation	1 25 "
Varnisher.	2	Germany	Germany	m	1	0	2	6	1w	12			8 25 w
Machine hand.	16	Michigan	Holland	s			0	1	1	12			3 50 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$585	0	\$584	0	0	no		\$10 00	yes	organ	2	1	1		\$1,000	2	\$8 00	14
385	\$300	385	0	0	"		4 00	"	none								13
812		501	0	0	"		10 00	"	piano	1				1,000	1	5 00	12
747		385	0	0	"		9 00	"	none								14
1,082			\$300	\$300	"			no	"	2			\$7 00	1,000	2	5 00	19
455	25	400	0	0	"		2 50	"	"						1	5 00	16
143			*	0	"			"	"				4 50				14
234			0	0	"			"	"								13
44*		448	0	0	"		3 50	yes	"								12
391	50	390	0	0	"		4 00	"	"					600	1	3 00	14
182			*	0	"			no	"				*				12
468		468	0	0	"		6 00	"	"	1	1						17
390		390	0	0	\$500	\$500		"	"	law			3 50			3 00	12
391			0	0	no			"	"				*				12
39			*	0	"			"	"								14
598	0	598	0	0	"		6 50	"	organ	1		1		1,250			10
251	0		0	0	"			"	none				3 00				8
156			*	0	"			"	"				*				13
214		214	0	0	"		6 00	"	"				3 50				14
286	0		0	0	"			"	"								12
143		143	0	0	"		4 00	yes	"								14
322		32	0	0	"		5 00	no	"				3 00				16
130	0		0	0	"			"	"				2 00				12
156	0		0	0	"		3 50	"	"								16
351	0	35	0	0	"			"	"				3 50				6
624			0	0	"			"	"								13
322	0		0	0	"		3 00	"	"				*				8
429		429	0	0	1,800	500		yes	"		1						15
374		374	0	0	no		6 00	"	"		1			185			12
178			*	0	"			no	"				*				13
329	0		0	0	"			"	"				3 50				12
30			*	0	"			"	"				*				14
351	0	216	0	0	"		4 50	"	"								9
458	100	25	200	0	1,000			"	"		2			1,000			21
515	0	350	50	0	720			yes	"		1				1	3 00	12
429	400	400	2	0	1,000			"	organ		1						12
690	0	600	0	0	200	150		no	none								7
390	0	390	0	0	no		6 50	"	"		1						13
468	0	450	0	0	900	500		"	"		1			600	1	3 00	11
429	0	425	0	0	no		4 50	"	"				*				14
156			*	0	"			"	"								15
393			0	0	"			"	"				3 50				13
390	0	350	0	0	500	200		"	"				*				13
156			*	0	"			"	"				*				14
152			*	0	"			"	"				*				12
156			*	0	"			"	"				*				13
392	0	382	0	0	"		3 50	"	"		1						8
290			50	0	"			"	"				3 50				12
412		395	0	0	"		18 00	yes	"	1	1		*				20
341	0		*	0	"			no	"				*				13
429	0	429	0	0	"		5 00	"	"				*				15
182			*	0	"			"	"				*				13

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Laborer.....	31	Holland...	Holland...	s	...	...	0	4m	4m	4	...	first wrk in U.S.	26 75 w
Machine-hand...	47	Germany...	Germany...	m	...	...	0	15½	15½	11	28	no wrk & sickness	1 50 d
"			ark	s	...	...	0	8w	8w	13	...	first work	3 00 w
"			nd...	s	...	...	0	½	½	13	...	...	3 00 w
"			nd...	m	...	...	8	½	½	11½	18	accident to self	3 25 "
Sand-paperer...			nd...	s	...	...	0	1m	1m	1	...	first work	3 00 "
Cabinet-maker			nd...	s	...	...	0	2w	2w	11½	19	sickness-vacation	1 00 d
Machine hand			nd...	s	...	...	0	2w	2w	6	...	first work in U. S.	3 00 w
Cabinet-maker			nd...	s	...	...	0	1w	1w	½	...	first work	4 00 "
Varnisher.....			nd...	m	2	0	8	8	2w	13	...	...	3 25 "
Teamster.....			nd...	m	2	0	1	35	1	13	...	...	6 75 "
Varnisher.....			nd...	s	...	...	0	8	5d	12	...	...	6 75 "
Laborer.....			nd...	m	6	1	7	2	2	13	...	...	6 75 "
Sawyer.....			nd...	m	2	0	4	13	8	12	...	...	50 00 m
Machine hand			nd...	s	...	...	1	7	2	11½	19	vacation	3 25 w
"			la...	m	0	0	1	2	2	11	28	sickness	3 25 "
Foreman.....			nd...	m	1	0	2	2	2	11½	13	shop closed	1 50 d
Varnisher.....	31	Germany...	Germany...	s	...	...	0	5	1w	12	...	...	3 25 w
Cabinet-maker...	19	Holland...	Holland...	s	...	...	0	6	1	11½	7	shop closed	1 00 d
Machine hand...	16	Germany...	Germany...	s	...	...	0	½	½	6	...	not in U. S.	3 00 w
"	16	Michigan...	Holland...	s	...	...	0	7w	7w	1½	...	first work	3 00 "
Finisher.....	16	Ireland...	Ireland...	s	...	...	0	1	1	10½	30	sickness	5 50 "
Foreman.....	31	Germany...	Germany...	m	4	1	7	8	8	10½	30	no wrk and sick	3 00 "
Finisher.....	19	Michigan...	"	s	...	...	0	2	11d	12	...	...	1 25 d
Cabinet-maker...	43	Holland...	Holland...	m	0	0	2	1	6	1	...	no work	1 25 "
"	38	"	"	m	3	1	6	5	7½	11	...	...	1 50 "
Laborer.....	71	Germany...	Germany...	w'r	9	...	2	2	2	1	...	sickness	1 00 "
Finisher.....	30	Holland...	Holland...	s	...	...	0	11	5w	11	...	...	1 25 "
Sand-paperer...	17	Michigan...	Ireland...	s	...	...	0	1	½	11	...	sickness	3 00 w
Varnisher.....	23	Holland...	Holland...	s	...	...	0	4	3	1	...	no work	3 25 "
"	17	"	"	s	...	...	0	1	1	1	...	"	7 50 "
Sand-paperer...	15	Canada...	Scotland...	s	...	...	0	3w	3w	1	...	first work	3 00 "
Stainer.....	23	Holland...	Holland...	m	4	0	5	2	2	1	...	sickness	3 25 "
Round-worker...	53	"	"	m	1	0	1	23	10	1	...	...	1 15 d
Varnisher.....	40	"	"	s	...	...	0	1	1	1	...	sickness	3 25 w
NEW ENGLAND FURNITURE CO.													
Foreman.....	33	Holland...	Holland...	m	0	0	1	3	3	11	...	no work	1 40 d
Machine hand...	16	U. S.....	U. S.....	s	...	...	0	2½	½	1	...	...	4 00 w
"	21	"	"	s	...	...	0	1½	½	1	...	...	1 25 d
Machine tender.	16	Holland...	Holland...	s	...	...	0	1½	1	1	...	"	3 00 w
Cabinet-maker...	45	"	"	m	6	2	7	2	½	11	...	"	1 00 d
"	19	Germany...	Germany...	s	...	...	0	4	1w	11	...	"	1 00 "
Machine tender.	14	Holland...	Holland...	s	...	...	0	2	1½	5½	...	first work	3 00 w
Machine hand...	23	"	"	m	1	0	2	3½	1	11½	18	no work	1 25 d
"	47	"	"	m	4	0	4	3	7½	10½	30	"	1 25 "
Machine tender.	15	U. S.....	Scotland...	s	...	...	0	2	4d	11½	13	"	3 50 w
Machine hand...	20	Holland...	Holland...	s	...	...	0	2	3	11½	19	"	1 00 d
"	13	"	"	s	...	...	0	½	2w	5½	...	first work	3 00 w
Cabinet-maker...	22	"	"	s	...	...	0	2m	2m	11	20	didn't want wrk	1 00 d
"	23	"	"	m	2	0	3	6	3	11	20	no work	1 50 "
Machine hand...	13	"	"	s	...	...	0	4	2	11½	13	"	4 00 w
Sand-paperer...	16	"	"	s	...	...	0	2	2	11½	19	"	4 00 "
"	15	U. S.....	"	s	...	...	0	1	2m	11½	19	"	3 00 "

TABLE No. 1.—CONTINUED —*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending	Cause for loss of time.	Wages received.
Carver.....	27	U. S.....	U. S.....	m	1			\$2 75 d
Cabinet-maker..	30	".....	".....	m	2		no work	1 75 "
Finisher.....	43	Germany	Germany	w	4		not answered	5 50 w
".....	29	".....	".....	m	0		no work	1 25 d
Shipping clerk..	31	U. S.....	U. S.....	s				2 25 "
Trimmer.....	35	".....	".....	m	0		no work	1 75 "
Machine hand...	23	".....	".....	m	0		"	1 25 "
".....	25	Canada	Canada	s			"	2 25 "
".....	24	Holland	Holland	s			"	1 25 "
Round-worker...	45	".....	".....	m	3		"	1 25 "
Packer.....	19	U. S.....	U. S.....	s			"	1 25 "
Machine hand...	24	".....	".....	s			"	1 50 "
Packer.....	19	Holland	Holland	s			"	6 00 w
Machine hand...	23	U. S.....	U. S.....	s			"	1 25 d
Cabinet-maker..	31	Holland	Holland	s			"	1 25 "
".....	43	U. S.....	England	m	2		"	1 50 "
Machine hand...	30	".....	Holland	s			"	4 50 w
Cabinet-maker..	17	Holland	".....	s			"	1 00 d
Finisher.....	27	U. S.....	Germany	s			"	1 75 "
".....	31	".....	U. S.....	m	4		"	1 50 "
Cabinet-maker..	39	".....	Holland	s			"	9 00 w
".....	39	".....	".....	m	2		"	7 50 "
".....	20	Holland	".....	m	0		"	1 25 d
Packer.....	25	U. S.....	U. S.....	m	1		"	1 25 "
Finisher.....	46	Germany	Germany	m	4		"	1 25 "
".....	15	U. S.....	".....	s				8 50 w
".....	34	Holland	Holland	s			no work	10 00 "
".....	30	".....	".....	m	2		"	10 00 "
".....	27	U. S.....	U. S.....	m	1		"	1 50 d
".....	24	Holland	Holland	m	0		"	10 00 w
Stock-clerk.....	26	U. S.....	U. S.....	m	0		"	12 00 "
Finisher.....	47	".....	".....	m	1		"	10 00 "
Sand-paperer...	17	Holland	Holland	s			"	3 50 "
".....	20	".....	".....	s			"	4 00 "
".....	18	Germany	Germany	s			"	4 00 "
Finisher.....	28	".....	".....	m	0		and no work	1 50 d
".....	27	Holland	Holland	m	0		no work	8 00 w
Sand-paperer...	23	".....	".....	s			"	1 00 d
Finisher.....	21	Germany	Germany	s			"	1 20 "
".....	55	U. S.....	U. S.....	m	1			7 50 w
".....	38	".....	England	m	0		no work	1 50 d
".....	40	".....	U. S.....	m	1		"	1 50 "
".....	25	Holland	Holland	m	0		"	10 00 w
Sand-paperer...	17	Germany	Germany	s			"	4 00 "
Foreman.....	28	U. S.....	U. S.....	m	0		"	2 50 d
Finisher.....	29	Germany	Germany	m	1		"	1 25 "
".....	23	Holland	Holland	m	1		"	1 50 "
".....	35	".....	".....	m	2		"	7 50 w
".....	32	".....	".....	m	2		"	2 25 d
Sand-paperer...	16	".....	".....	s			"	3 00 w
Finisher.....	42	".....	".....	m	6		"	7 50 "
Sand-paperer...	17	U. S.....	U. S.....	s			"	4 25 "
Trimmer.....	28	Canada	Canada	m	1		"	1 75 d
Packer.....	21	U. S.....	U. S.....	s			"	1 50 "
Machine hand...	21	Germany	Germany	s			"	1 50 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$458		\$458	0	0	refuse	refuse	refuse	no	none	1		1		refuse	ref.		16
534		500	0	0	\$500	\$325		yes	piano	1							15
280	0	300	0	0	no		\$1 00	no	none								12
374	0	300	0	0	"		4 00	"	"	1			\$4 50	refuse	ref.		14
702			0	0	"			"	"								16
435		250	\$100	0	1,300	800		"	"	1							15
374		350	0	0	no		6 00	"	"				4 00		1	5 00	14
643	0		0	0	0			"	cornet				3 50				13
301			0	0	refuse	refuse		"	none								12
691	0	600	0	0				"	"								
311			50	\$64	no			"	violin				3 50				14
429			0	0	"			"	none	1	1		3 25				8
152			0	0	"			"	"				3 00				12
374			0	0	"			"	"				3 50				14
341			0	0	"			"	"				3 00				12
448		448	0	0	refuse			yes	"	1			refuse				18
214			0	0	no			no	"				3 00				12
278			0	0	no			"	"	1	1	1	refuse				12
523		400	100	0	1,500	500		yes	"	1	1			\$300	1	5 00	16
390		350	0	0	no		7 00	"	"	1	1						15
409			50	0	"			no	violin	1			4 50				12
341		240	0	0	900	200		yes	none								7
374		300	40	0	no		6 00	no	no								10
366		300	25	25	"		3 00	yes	"		1						18
366	0	350	0	0	"		5 00	no	"								14
182			*	0	"			"	"		1						14
477	0		50	50	"			"	"	1	1		3 50				16
487	0	400	0	0	700	400		yes	"	1	1						13
261		300	40	75	no		7 00	no	"	1	1				1	5 00	14
477	\$300	400	0	0	800	300		no	"								7
598		350	250	350	no		free	"	organ	1	3						17
487		450	0	0	"		9 00	yes	none								12
159			*	0	"			no	harm'ca		1		*				14
173	0		0	0	"			"	none		1		3 00				14
139			0	0	"			"	"								14
439		400	0	0	"		6 00	yes	"	1							10
399	0	350	0	0	"		6 00	no	"								12
740	0		0	0	"			no	"				3 25				15
351			*	0	"			no	"		1		*				14
390		300	0	0	"		10 00	yes	piano	2	1	1		2,000			17
439		284	75	75	"		7 00	"	no		1	1					12
448		400	0	0	"		6 00	"	no		1	1			1	5 00	14
455		350	103	0	1,300	800		no	organ	1	1	1					11
104			*	0	no			no	none	1	1	1	*				14
747		500	200	150	no		8 00	yes	"	1	1	1					18
366	0	300	50	0	"		6 00	no	"		1						14
439	10	375	50	100	400	350		yes	"	1	1						15
341	0	275	50	50	no		4 50	"	"		1	1					9
658		600	0	0	1,300			"	"	1	1						15
104			*	0	no			no	"				*				10
360	0	250	0	0	1,000	1,000		yes	no								13
218			*	0	no			no	piano	1			*				15
523		450	25	25	"		3 00	yes	none	1	1						12
439			0	0	"			no	"	1	1		3 00				15
390			0	0	"			no	"	1	1		4 00		1	5 00	14

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupati	Cause for loss of time.	Wages received.
M. L. Swa		
Round-work	no work	\$1 10 d
Machine ha	"	1 25 "
Finisher...	"	4 20 w
Round-work	"	1 05 d
Foreman...	no work	2 25 "
Finisher...	"	1 00 "
Foreman ..	"	1 40 "
Machine ha	"	1 40 "
"	s'k & sickness	1 00 "
Cabinet-ma	no work	4 00 w
"	"	1 00 d
Shipping cl	vacation	1 10 "
Cabinet-ma	no work	1 75 "
Packer.....	ot in U. S.	1 10 "
Engineer...		10 00 w
Machine ha	first work	2 55 "
"	no work	2 55 "
"		1 20 d
Finisher...	no work	2 55 w
Packer.....	first work	2 75 "
Sand-paper	"	2 55 "
Machine ha	no work	1 00 d
"	first work	2 55 w
"	"	3 20 "
"	no work	1 00 d
"	first work	1 00 "
"	no work	9 00 w
Marker....	first work	2 55 "
Machine ha	"	1 00 d
"	no work	2 55 w
Foreman ..		7 60 "
Cabinet-ma	no work	1 40 d
Machine ha	first work	2 55 w
"		2 25 d
Foreman...		1 20 "
Cabinet-ma		7 20 w
Foreman ..	repairing	2 00 d
Cabinet-ma		2 00 w
Elevator b	first work	2 55 "
Machine ha	no work	1 20 d
Carpenter ..		7 60 w
Plumber...		1 10 d
Machine ha	vacation	1 00 "
"	first work	2 55 w
"		1 25 d
"		2 55 w
Yardman...		1 25 d
Cabinet ap	no work	45 "
Finisher...		1 25 "
Machine ha	s'k & sickness	1 60 "
Laborer....	first work	2 55 w
Machine ha	no work	1 25 d
Cabinet-ma		1 25 "
Finisher...	no work	90 "
Cabinet-ma		2 25 "
Finisher...		1 25 "

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
Daily papers.	Weekly papers.	Magazines.															
343	0	\$250	0	0	\$700	\$500	no	none									14
841	0	300	0	0	750	400	yes	"									13
300	0		*	0			no	"									13
831	0	800	0	0	no		\$5 00	"									13
702		500	\$150	0	650		yes	"		1	1	1		\$2,500	2	\$10 60	16
999	\$100	700	0	0	no		11 00	"			1	1					16
428		400	0	0	600	275		"	organ	1	1						26
437	0	850	0	0	500	300	no	none			1						17
299			60	\$150				no	"				\$3 00				12
183	0		*	0				"	"				*				11
230	0		0	0				"	"				8 25				13
322	0		12	40				"	"	1	1		8 00		1	5 00	19
500		500	0	0	800			yes	"		1			200			16
229			0	0	no			no	"	1			8 50				18
520		520	0	0	2,500	500	yes	"	"	1	1				1	5 00	20
55			*	0				no	"				*				11
99			*	0				"	"				*				13
406			0	0	no			"	"				3 50				16
116			*	0				"	"		2		*				13
26			*	0				"	"				*				13
66			0	0				"	"				*				13
299			0	0	no			"	"			1	8 50				15
15			*	0				"	"				*				14
7			0	0	no			"	"		1		2 50				15
305		305	0	0	"		6 00	"	"								14
156			0	0				"	"				3 50				20
895		395	0	0	600	200	yes	"	"		1						14
2			*	0				no	"				*				13
812			0	0	no			"	"				8 00				13
88			*	0				"	"				*				14
390			0	0	no			"	"				8 00		1	5 00	16
400		218	0	0				"	"				8 50				15
66			*	0				"	"				*				12
702	10	702	0	0	no		7 00	"	"	1	1						15
406		406	0	0	"		6 00	yes	"		2						15
374			75	40	"			no	"				8 00				11
598		385	100	0	2,000			yes	organ					80			16
187			*	0				no	none				*				13
66			0	0				"	"				*				14
262	0	450	0	0	400			"	"				*				7
390		225	75	0	no		5 50	yes	"		1						12
843			0	0	no			yes	"		1		2 50				18
299			*	0	"			"	"				*				14
22			0	0	"			"	"				*				13
390		210	100	200	2,500			yes	"	1			*		1	5 00	12
133			*	0	no			"	"				*				18
390	0	390	0	0	700	300		yes	"				*				13
47			*	0	no			"	"				*				14
390			0	0	"			"	"	1			4 50				19
429		429	0	0	2,500			no	"	1			*	1,000	1	5 00	12
66			*	0	no			"	"				*				14
195		195	0	0			6 00	yes	"				*		1	5 00	13
390		390	0	0	1,800			no	"				*		1	5 00	12
187			*	0	no			"	"				*				14
702		702	0	0	"		10 00	yes	organ	1				2,000			14
890			0	0	"			none	none				3 50				19

* Gives wages to parents and lives at home.

TABLE NO. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
FOLDING CHAIR AND TABLE CO.													
Machine hand.	47	Penn.	U. S.	m	0	0	1 12	4	12	13	---	---	\$3 00 d
Oil finisher.	48	Holland	Holland	m	3	1	3 4	4	11½	52	13	no work	1 50 "
Laborer.	20	Michigan	Ireland	m	0	0	0 3	9	11½	7	---	shop closed	1 50 "
Finisher.	25	Penn.	Germany	m	4	1	5 6	8m	11½	---	---	---	1 25 "
Cabinet-maker.	42	Ohio	U. S.	m	1	1	2 25	1	11	26	---	no work	16 00 w
Machine hand.	32	New York	Holland	m	3	2	4 19	1	11	26	---	---	9 00 "
"	18	Michigan	U. S.	s	---	---	0 2	2	11	26	---	---	1 25 d
"	48	---	Germany	m	3	---	2 30	7	11½	6	---	shop closed	2 75 "
"	51	New York	U. S.	m	1	0	1 25	6w	12	---	---	---	1 75 "
Packer.	23	Canada	Scotland	s	---	---	0 ½	½	2½	---	---	first work in U. S.	1 25 "
Engineer.	55	New York	U. S.	m	1	0	1 18	2½	12	---	---	---	2 50 "
Machine hand.	22	Michigan	Holland	m	1	0	2 22	2	12	---	---	---	1 00 "
Finisher.	35	Holland	"	m	0	0	1 18	3	12	---	---	---	8 25 w
"	63	---	"	m	4	1	5 15	3	11½	19	---	no work	1 25 d
Cabinet-maker.	22	Michigan	"	s	---	---	1 6	6w	6	156	---	---	1 25 "
Finisher.	24	---	"	s	---	---	0 10	3	11	26	---	---	1 50 "
Cabinet-maker.	55	New York	U. S.	m	3	1	1 30	6	8	104	---	---	9 00 w
Finisher.	23	Holland	Holland	s	---	---	0 4m	1m	10	52	---	---	1 25 d
Machine hand.	16	U. S.	U. S.	s	---	---	0 2	½	11½	13	---	---	4 00 w
Cabinet-maker.	53	New York	"	m	2	1	2 30	8m	11	26	---	---	8 00 "
Packer.	19	U. S.	"	s	---	---	0 4	4	11½	19	---	---	1 25 d
Cabinet-maker.	36	---	"	m	3	1	4 10	5	11	26	---	---	12 00 w
Finisher.	16	Holland	Holland	s	---	---	0 1	8m	11½	19	---	---	4 50 "
Round-worker.	31	---	"	w'r	1	0	2 3	3	11½	19	---	---	1 25 d
Turner.	45	U. S.	U. S.	w'r	3	2	2 30	2	12	---	---	---	12 00 w
Machine hand.	30	"	"	m	0	0	1 9	5	11½	19	---	sickness	2 25 d
Foreman.	28	Ireland	Ireland	m	0	0	1 15	4	11½	19	---	no wk & sickn's	2 50 "
Finisher.	27	U. S.	Holland	s	---	---	1 13	2	11½	19	---	no work	1 50 "
Foreman.	25	"	England	m	1	0	3 9	8	12	---	---	---	2 25 "
Turner.	24	"	U. S.	s	---	---	0 4	½	12	---	---	---	12 00 w
Cabinet-maker.	19	Sweden	Sweden	s	---	---	0 6	8m	9	78	---	no work	1 25 d
"	45	England	England	m	1	1	2 9	9	12	---	---	---	3 00 "
"	26	Canada	"	m	0	0	1 3	3	10	52	---	no work	10 00 w
Laborer.	29	Sweden	Sweden	s	---	---	0 2	½	10	52	---	not answered	7 00 "
Filler.	32	England	England	m	3	1	4 10	1w	6	156	---	no work	1 25 d
Finisher.	20	Michigan	Ireland	s	---	---	0 8	8d	9	78	---	---	1 25 "
"	28	Sweden	Sweden	s	---	---	0 3	8d	10	52	---	not answered	1 25 "
Filler.	48	Ireland	Ireland	s	---	---	0 5	½	8	104	---	no work	1 25 "
Sand-papery.	17	Indiana	U. S.	s	---	---	0 1m	1m	12	---	---	---	4 00 w
Turner.	36	Holland	Holland	m	3	2	4 13	3	11½	13	---	no work	2 50 d
Trimmer.	53	Michigan	U. S.	m	4	0	3 7	7	11½	6	---	not answered	9 00 w
Machine hand.	23	Indiana	"	s	---	---	0 12	8	11½	6	---	sick and no wrk	2 00 d
"	16	Michigan	"	s	---	---	0 3	3	10	52	---	no work	90 "
Finisher.	28	Holland	Holland	m	1	0	2 5	1½	11	26	---	---	1 50 "
Machine hand.	23	"	"	m	6	3	7 7	2	11	26	---	---	1 75 "
"	19	"	"	s	---	---	0 7	4	11½	6	---	---	1 40 "
Finisher.	25	Ohio	U. S.	s	---	---	0 7	2m	10	52	---	tramping	1 35 "
Machine hand.	23	Michigan	"	s	---	---	0 4½	3	11	26	---	no work	2 50 "
STOWE & DAVIS FURNITURE CO.													
Turner.	40	Michigan	U. S.	m	4	2	5 18	3	11½	13	---	fire	2 00 "
"	43	Ohio	"	m	1	0	2 30	3	11½	13	---	---	2 00 "
Laborer.	39	Holland	Holland	m	2	1	3 6	4	11½	13	---	---	1 00 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount made during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you?	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	name or address.	Age began work.	
3024		\$300	\$360	\$300	no		\$4 20	yes	none	2						13
448	0	848	100	400	\$1,000			no	"		1	1				29
340	0		0	0	no		6 00	no	piano	1	1		\$5 00			17
332	0	883	0	0	"		8 00	"	none							18
390		890	0	0	"			"	"							10
702		480	200	0	5,000	\$800		yes	piano	1	1					16
429		429	0	0	1,100	100		"	none	1	1					18
837			*	0	no			no	"				*			12
840		400	0	0	2,000			yes	organ	1	2					18
516		855	0	0	no		7 00	"	none	1						18
81	\$100		100	80	"			no	"				3 50			13
865		400	380	0	2,000			yes	"	1	1	1	\$2,000			18
312		812	0	0	no		6 00	no	"							16
479	0	800	0	0	1,700	150		yes	organ		1		125			20
391	0	391	0	0	1,400	450		no	none		2					12
195			0	0	no			"	"		2		5 00			14
429			0	0	"			"	"	1			4 00			14
812		812	0	0	"			"	"							14
225	80		* 50	0	"			"	"		1		3 25			18
189			*	0	"			"	"	1			*			19
891		891	0	0	"		12 00	yes	"							28
360			40	120	"			no	organ	1			3 00			18
572		500	120	0	800			yes	none	1			1,000			13
319			*	0	no			no	"		1		*			10
396	16	850	0	0	"		2 50	yes	"							9
624		550	0	0	"			no	"	1						12
659		800	0	0	"		9 00	"	"	1						13
781	0	600	0	0	"		8 00	"	"	1	1					11
439			0	0	"			"	"				†			14
702		600	0	0	"		14 00	yes	"	2			500			16
624			0	0	"			no	"	1			4 50	1	5 00	16
292			0	0	"			"	"				3 50			13
936		936	0	0	3,000	400		yes	"	1	2		2,000			17
438		438	0	0	no		8 00	"	"							18
303			0	0	"			no	"		1		3 50			11
196	0	1	0	0	"		1 00	yes	"	1						14
202			*	0	"			no	"				*			16
235	0		0	0	"			"	"				3 50			14
260	0		0	0	"			"	"	1	2		4 00			29
308			*	0	"			"	"	1			*			14
747		500	0	0	2,200	300		yes	organ		1					18
458		458	0	0	2,900	2,500		"	"	1						17
611			0	0	no			no	none				4 00			10
384			0	0	"			"	"				8 00			18
429		400	0	0	1,700	600		yes	"							12
600	0	500	0	0	1,200			"	"		1		200			14
492			0	0	no			no	"		3		3 50			12
325			0	0	"			"	"				3 50	1,500	1	5 00
715			0	0	"			"	"	1			5 00			14
508		508	0	0	"		3 00	yes	piano	1	1			1	5 00	14
508		508	0	0	"		5 50	"	none		2					19
298	0	298	0	0	700	800		no	"	1						18

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Finisher.....	14	Holland.	Holland.	s	—	—	0	1	1	11½	18	fire	\$3 00 w
Cabinet-maker.....	27	Germany.	Germany.	s	—	—	0	1½	1	11½	18	"	1 50 d
Turner.....	73	New York.	U. S.	m	4	0	2	23	0	11½	18	"	10 00 w
".....	16	Canada.	Canada.	s	—	—	0	4m	4m	11½	18	"	4 00 w
Cabinet-maker.....	21	Holland.	Holland.	s	—	—	0	3	3	11	26	shut down	8 00 "
Finisher.....	18	"	"	s	—	—	0	1	1	11½	18	fire	7 50 "
".....	27	"	"	s	—	—	0	4	15	11½	18	"	1 25 d
".....	19	"	"	s	—	—	0	6	6	11½	18	"	6 00 w
Machine hand.....	14	"	"	s	—	—	0	7½	4½	5½	6	first work	2 50 w
Cabinet-maker.....	22	Canada.	Canada.	s	—	—	0	7	4	11½	6	fire	2 00 d
Gluer.....	48	Holland.	Holland.	m	4	2	5	7	8	12	—	—	8 50 w
".....	17	"	"	s	—	—	0	2	3	11½	18	fire	4 00 w
Cabinet-maker.....	23	Prussia.	Poland.	s	—	—	0	7m	1w	7	—	not in U. S.	8 25 "
Bound-worker.....	26	Holland.	Holland.	s	—	—	0	11m	10½	12	—	first work in U. S.	1 25 d
Machine hand.....	31	"	"	m	3	2	4	2½	4½	12	—	—	10 00 w
".....	27	U. S.	Ireland.	m	1	0	2	12	6w	11	26	no work	1 75 d
Bound-worker.....	48	Holland.	Holland.	m	3	1	4	5	5	11½	19	"	1 25 "
Sand-paperer.....	20	"	"	s	—	—	0	5w	6w	10½	—	first work in U. S.	3 00 w
Bound-worker.....	40	"	"	m	5	2	6	2	2	10	52	no work	1 25 d
Cabinet-maker.....	23	Prussia.	Poland.	m	2	0	3	3	½	12	—	—	8 25 w
Finisher.....	27	Holland.	Holland.	s	—	—	1	10	8	11½	18	no work	1 50 d
Foreman.....	23	Prussia.	Poland.	s	—	0	3	6	6	12	6	fire	1 50 w
Teamster.....	37	New York.	Germany.	m	3	1	2	5	5	13	—	no work	9 00 "
Machine hand.....	41	Holland.	Holland.	m	1	1	2	16	3½	11½	18	fire	2 00 d
Finisher.....	19	"	"	s	—	—	—	1m	1m	10	—	not in U. S.	6 00 w
Machine hand.....	20	Michigan.	Germany.	s	—	—	0	1	2	11½	19	no work	1 50 d
".....	23	Holland.	Holland.	s	—	—	0	6	6	11½	6	fire	1 50 w
Cabinet-maker.....	25	Germany.	Germany.	s	—	—	0	7	5	11½	19	no work	1 50 "
Finisher.....	22	Michigan.	Holland.	s	—	—	0	8	2	11½	19	"	1 50 "
Machine hand.....	15	New York.	U. S.	s	—	—	0	1m	1½	11½	18	fire and holiday	3 00 w
".....	14	Michigan.	Holland.	s	—	—	0	1	1	11½	18	fire	2 50 "
".....	19	Holland.	"	s	—	—	0	2	2	11½	19	sickness	1 50 d
".....	18	Michigan.	U. S.	s	—	—	0	8m	8m	11	26	fire and sickness	1 25 "
Foreman.....	39	Ohio.	"	m	0	0	2	2	7m	12	—	—	88 33 m
Machine hand.....	23	Holland.	Holland.	m	0	0	2	5	½	11½	18	my own fault	8 00 w
".....	30	Canada.	Canada.	m	1	0	2	5	3	12	—	—	9 00 "
".....	23	Holland.	Holland.	s	—	—	0	5	2½	12	—	—	8 70 w
Finisher.....	21	"	"	s	—	—	0	3½	2	12	—	—	7 00 "
Packer.....	28	Michigan.	England.	s	—	—	1	5	8	11	25	vacation	50 00 m
Machine hand.....	32	Ireland.	Ireland.	m	3	0	4	12	5	12	—	—	1 75 d
Foreman, fn.....	40	Holland.	Holland.	m	1	0	4	26	4	12	—	—	2 25 "
WORDEN FURNITURE CO.													
Rubber.....	23	Holland.	"	m	1	0	2	5	6	11	25	no work	1 75 "
Shellacer.....	17	U. S.	"	s	—	—	0	2	2	9	78	"	1 15 "
Laborer.....	18	"	"	s	—	—	0	2m	2m	2	—	first work	2 40 w
Packer.....	19	"	"	s	—	—	0	2	2	11½	6	no work	7 00 "
Filler.....	65	Holland.	"	w	3	0	0	1½	1½	11	26	"	7 00 "
Sand-paperer.....	27	U. S.	U. S.	m	1	0	3	8m	1½	11½	18	"	7 00 "
Stainer.....	28	"	"	m	2	1	3	1	1	11	26	"	1 35 d
Varnisher.....	48	Germany.	Germany.	m	5	3	6	7	6	11	26	"	9 00 w
Packer.....	21	U. S.	U. S.	m	1	0	2	2	2	11½	18	"	8 00 "
Cabinet-maker.....	61	"	Holland.	s	0	0	1	30	7w	12	—	—	1 50 d
".....	9	"	"	s	—	—	0	1	1	11	26	no work	1 00 "
".....	39	"	U. S.	m	4	0	1	4	4	11½	18	"	9 00 w

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$149			*	0	no			no	none				\$3 *				13
448			0	0	"			"	"								14
498		\$498	0	0	"		\$8 00	yes	"	1							10
199			*	0	"			no	"				*				14
881			*	0	"			"	"				*				15
874			*	0	"			"	"				*				12
374	0		0	0	"			"	"				3 00				12
299	0		*	0	"			"	"				*				13
80	0		0	0	"			"	"				*				14
611	\$50		0	0	"			"	"				4 00				15
442	0	442	0	0	\$350			"	"		1		*				13
199	0		*	0	no			"	"				4 00				14
230	0		0	0	"			"	"				3 00				14
849	0		\$25	0	"		3 00	"	"		1						13
520	50	400	45	0	"			"	"								10
500	400	50	0	0	"		6 00	"	"	1							15
416	100	400	0	0	"		4 00	yes	"								12
188	0		*	0	"		4 00	no	"				*				15
283	0	250	75	0	\$75		4 00	"	"		1						13
429	0	400	0	0	"		4 00	"	"								13
448	0	400	0	0	850	\$201		"	"								12
780	0	400	380	0	1,800	500		yes	"	1	3			\$500	1	\$5 00	12
468	0	263	0	0	no		7 00	"	"	1							15
508	16	500	98	0	900			"	"		1						12
280			0	0	no			no	"				3 00				14
439			*	0	"			"	"				*				15
458			50	0	"			"	"				3 50				15
439	0		0	0	"			"	"				4 00				18
439			250	0	"			"	"				3 00				13
149			*	0	"			"	"				*				13
124			*	0	"			"	"				*				18
439	0		0	0	"			"	"				3 00				11
357		150	25	0	"			"	"				3 00				16
1,000		300	30	0	"		16 00	yes	"	1		2			2	10 00	14
899	0	839	60	0	500	300		yes	"		1						12
468	0	443	25	0	no		9 00	"	"								19
452			100	0	900	475		no	"	1	1		3 00				14
384	0		0	0	no			"	"				3 50				14
550			50	0	"			"	"				5 50				12
546	40	546	0	0	"		8 00	yes	"		1	1					16
702		702	0	0	2,000	200		no	"					3,000			12
500	0	400	25	0	550	400		yes	"				*		1	5 00	12
289			*	0	no			no	"				*				12
20			*	0	"			"	"				*				18
356			20	20	"			"	"				3 00				12
334	300		0	0	"			"	"				8 00				14
349		300	25	0	800	80		yes	"		1				1	5 00	12
388		425	0	0	450	425		no	"						1	5 00	18
429	750	400	0	0	1,100	250		"	"		1			1,000			16
399		399	0	0	no		3 00	yes	"								12
468		300	150	0	3,000	200		"	organ	1	1						14
286			0	0	no			no	none				3 00				13
448		400	48	50	"		7 00	yes	organ	1	1				1	5 00	21

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Machine hand.	15	Holland.	Holland.	s	1	0	0	2	2	11½	12	no work	\$2 70 w
Round-worker.	14	"	"	w'r	1	0	1	2	2	11½	12	"	1 00 d
Machine hand.	16	"	"	s	1	0	0	1	1	11½	12	"	4 00 w
"	15	"	"	s	1	0	0	2m	2m	11½	12	"	3 40 "
"	15	"	"	s	1	0	0	2w	2w	11½	12	"	3 25 "
"	22	"	"	m	2	2	2	9	2½	12	12	"	1 40 d
"	25	U. S.	Germany.	m	0	0	1	1	1	12	12	"	1 25 "
"	27	Holland.	Holland.	w'r	0	0	0	7	2	12	12	"	1 75 "
Cabinet-maker.	24	"	"	s	2	2	0	2	2	11½	12	no work	8 00 w
Rubber.	31	U. S.	"	m	2	2	4	½	½	12	12	"	1 75 d
"	19	"	U. S.	s	1	0	0	2	1	10½	20	no work	1 75 "
"	25	Holland.	Holland.	m	3	0	4	6	1½	11½	19	"	2 80 "
Cabinet-maker.	19	U. S.	U. S.	s	1	0	0	1	1	11	20	"	3 00 w
"	21	Holland.	Holland.	s	1	0	2	9	8m	11½	19	"	1 15 d
"	17	"	"	s	1	0	0	4	6w	9	76	"	3 50 w
"	19	U. S.	"	s	1	0	0	6	3	11	20	"	10 00 "
Carver.	21	"	"	s	1	0	0	2	1	11½	19	"	1 50 d
Cabinet-maker.	22	Germany.	Germany.	m	4	0	2	20	2	12	12	first work	1 50 "
"	15	Holland.	Holland.	m	1	0	2	5m	8m	8	12	no work	4 50 w
"	26	"	"	m	1	0	2	5	3	11½	19	"	9 00 "
Machine hand.	17	"	"	s	1	0	0	4	1	11½	12	"	2 00 "
Cabinet-maker.	21	U. S.	"	s	1	0	0	8	1½	11½	12	"	15 00 "
"	24	Holland.	"	m	2	0	2	2	2	10	62	sick, no work	10 00 "
"	20	U. S.	"	m	1	0	2	2	1	11½	12	no work	2 50 d
Carver.	20	"	U. S.	s	1	0	0	1	½	9	78	"	1 50 "
Filler.	32	Holland.	Holland.	s	1	0	1	1½	1½	11	26	"	8 00 w
Ass't foreman.	30	"	"	m	2	0	2	5	1½	12	26	"	15 00 "
Filler.	23	"	"	w'r	3	0	2	1	1	11	26	no work	8 00 "
Sand-papercr.	14	U. S.	"	s	1	0	0	1½	½	6	12	first work	2 40 "
Carver.	17	"	U. S.	s	1	0	0	8m	8m	12	12	"	3 00 "
GRAND RAPIDS VENEER WORKS.													
Machine hand.	34	U. S.	U. S.	m	1	1	2	1	1	11½	19	no work	1 75 d
Crater.	17	"	Germany.	s	1	0	0	1	1	10	52	"	1 10 "
Machine hand.	31	"	"	s	1	0	0	4	½	12	12	"	1 25 "
Pressman.	21	"	"	s	1	0	0	1	1	12	12	"	8 00 w
Crater.	20	"	U. S.	s	1	0	0	1½	1½	11½	12	no work	1 00 d
Laborer.	32	"	Ireland.	m	3	0	3	18	8m	12	12	"	1 25 "
Machine hand.	25	Canada.	"	s	1	0	0	½	½	11½	12	no work	1 60 "
Engineer.	30	U. S.	U. S.	m	0	0	1	15	4m	12	12	"	1 75 "
Mach. repairer.	45	"	"	m	0	0	1	10	½	6	156	no work	2 00 "
Crater.	30	Holland.	Holland.	m	2	0	3	1	1	11½	12	"	1 00 "
Round-worker.	21	U. S.	Ireland.	s	1	0	1	1	½	12	12	"	7 00 w
Veneer cutter.	34	Penn.	U. S.	m	3	1	1	1	6	12	12	"	2 00 d
Machine hand.	20	Michigan.	"	s	1	0	1	1	1	11½	12	repairing	1 15 "
Sawyer.	23	New York.	Canada.	m	1	0	1	1	1	12	12	"	1 00 "
"	23	Michigan.	U. S.	s	1	0	1	1	3	12	12	"	1 60 "
Packer.	23	"	"	m	0	0	1	1	8m	12	12	"	1 25 "
Sawyer.	26	Penn.	"	m	0	0	1	1	1	12	12	"	1 10 "
Log roller.	31	Michigan.	Ireland.	s	1	0	1	1	2m	9	78	no work	1 25 "
"	34	Ohio.	U. S.	s	1	0	1	1	2m	12	12	"	1 25 "
Gluer.	30	Holland.	Holland.	m	3	0	1	1	6	12	12	"	2 00 "
Machine hand.	25	Michigan.	Germany.	s	1	0	1	1	7	12	12	"	2 00 "
Veneer cutter.	28	Canada.	Canada.	s	1	0	1	1	3	12	12	"	1 25 "
Machine hand.	49	Isle of Man.	Scotland.	m	1	0	1	1	3	12	12	"	1 50 "

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefits in case of sickness or accident.	Age began work.
186			*					no	none				*				13
289	0	289	0					"	"				*				13
189			*					"	"				*				14
120			*					"	"				*				15
122			*					"	"				*				14
427		425	0	0	"		\$4 00	yes	"						1	\$5 00	14
390		375	\$15	\$15	"		8 50	no	"				\$4 00		1	5 00	15
548	0	100	50	200	"			"	"	1			8 00		1	5 00	13
390	0	50	0	0	"			"	"								14
548	0	548	0	0	"		7 00	yes	"								14
478			0	0	"			no	"				5 00				16
731		400	800	0	\$2,800	\$1,600		yes	"						1	5 00	17
861			0	0	no			no	"				8 50				15
236	0		0	0	"			"	"				8 48				19
139			*	0	"			"	"				*				13
477			30	30	"			"	"	1			3 00				13
439			0	0	"			"	"				†				14
488	0	400	0	0	500			yes	piano								14
156			0	0	no			no	none				3 00				14
429	0	403	0	0	1,500	1,150		yes	"								13
448			45	50	no			no	"				†				13
747			100	300	"			"	"				4 00				12
485	0	400	0	0	1,400	1,200		yes	"								13
747		600	0	0	no		4 00	"	"								10
351			75	50	"			no	"				†				15
286	0		0	0	"			"	"				5 50				13
730	0	300	0	0	"		9 00	yes	organ	1	2	1			1	5 00	16
286	0	250	0	0	1,000			no	none		1						12
62			*	0	no			"	"				*				13
156			*	0	"			"	"				*				14
512		400	0	0	"		8 00	yes	organ	1			*				15
286			*	0	"			no	none				8 50				15
290			*	0	"			"	"				*				15
416			*	0	"			"	"				*			1	5 00
859			100	200	"			"	"	1			11 00				13
390		300	25	0	"		5 00	"	"	1			8 50				14
448			25	25	"			"	"								12
548		348	300	1,500	"		18 00	yes	"	1			8 50				9
812		500	0	0	"		11 00	"	"	1							14
299	0	299	0	0	"		2 50	no	"								13
364			75	55	"			"	"				8 50				16
621		812	0	0	"		8 00	yes	"	1			8 50	\$100			12
344			0	0	"			no	"				8 50				12
812		150	75	0	"		8 50	"	"				8 50				12
468			0	0	"			"	"								15
390		260	0	0	"		6 00	"	"								14
343		343	0	0	"			"	"								16
292			0	0	"			"	"				8 50				12
390			0	0	"			"	"				8 50				12
624	0	812	100	0	3,000	400		yes	organ		3		4 00	2 50	1	5 00	14
621			36	0	no			no	none	1			8 50				13
290			0	0	"			"	"				8 50				15
624		624	0	0	"		7 00	"	"	1			8 00				13

* Gives wages to parents and lives at home. † Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.
Supt.	40	Canada	England	m	7	5	8	7	
Stock man	36	Indiana	U. S.	s			0	13	
Yard man	30	Michigan	Ireland	s			1	2	
Machine hand	21	"	"	s			0		
Crater	31	Holland	Holland	m	4	1	4		
Book-keeper	30	Nevada	Ireland	s			0	2	
Machine hand	27	Michigan	U. S.	m	1	0	3	1	
"	21	"	France	s			0	3	
"	25	"	Germany	s			0	5	
Packer	42	"	Ireland	w'r	4	1	1	5	
Kiln hand	25	Russia	Poland	s			0	3m	
Press hand	22	Michigan	Ireland	s			0	1	
Machine hand	14	Penn.	Germany	s			0	1½	
Dry kiln	35	Russia	Poland	m	3	0	4	7m	
"	31	New York	Germany	m	1	0	2	5m	
Asst. foreman	55	Michigan	U. S.	w'r	0	0	0	6	
Machine hand	23	"	Belgium	m	0	0	1	13	
"	30	Russia	Poland	m	3	1	4	1½	
Laborer	23	"	"	s			0	3m	
UNIVERSAL TRIPOD CO.									
Cabinet-maker	40	Cent. Am	Germany	m	3	3	4	26	
Sander	17	Holland	Holland	s			0	1	
Finisher	22	"	"	m	4	1	5	17	
Sander	20	"	"	s			0	5m	
Machine hand	24	Indiana	England	s			0	10	
Cabinet-maker	22	Germany	Germany	s			0	3½	
Polisher	35	Holland	Holland	m	1	0	2	3	
Sander	16	"	"	s			0	7m	
Packer	27	Michigan	"	m	1	0	2	½	
Trimmer	17	Holland	"	s			0	4m	
Finisher	22	"	"	s			2	3	
Oil finisher	31	"	"	s			0	10	
Finisher app.	15	Michigan	"	s			0	6	
Finisher	22	Holland	"	s			0	11	
"	20	"	"	m	1	0	2	3½	
Packer	23	Canada	England	m	1	0	2	1	
Machine hand	32	Vermont	U. S.	m	4	1	5	16	
Finisher	39	Holland	Holland	m	1	1	3	3	
Cabinet-maker	30	Canada	Germany	m	0	0	1	5m	
Machine hand	21	Germany	"	s			0	3	
Sand-paperer	17	Ireland	Ireland	s			0	½	
Finisher	30	Holland	Holland	m	2	1	3	13	
Polisher	36	"	"	m	2	2	3	4	
Finisher	18	"	"	s			0	3	
Varnisher	29	"	"	m	1	0	2	17	
Filler	43	"	"	m	5	1	5	7	
Machine hand	24	"	"	m	0	0	1	2	
Stainer	42	"	"	m	0	0	1	1	
Finisher	20	"	"	s			0	5w	
"	21	"	"	s			0	3	
Stock keeper	26	"	"	m	1	0	2	½	
Stock clerk	21	"	"	s			0	4m	
Finisher	19	"	"	s			0	1½	
Cabinet-maker	30	Germany	Germany	m	4	2	5	14	

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual living expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How many benefit societies do you belong to.	Weekly benefit in case of illness or accident.	Age began work.
\$2,000	\$800	\$1,500	\$800		no		\$80 00	yes	none	3						14
282			0		"			no	"	1			\$8 50			14
285			80 00	\$80 00	"			"	"				3 50			15
286	0	308	0	0	"		8 50	yes	"				5 50			15
000			refuse	0	"			no	"	1			4 00			11
367		357	0	0	"		6 00	yes	organ							14
380			0	0	"			no	none				8 50			18
428			0	0	"			"	"				4 00			18
458			0	0	"			"	"				7 50			18
286	0		0	0	"			"	"				3 75			10
418			0	0	"			"	"				4 00			18
119			*	0	"			"	"				*			12
288	200	248	40	40	"			"	"							12
299		299	0	0	\$190	\$16		yes	"	1						18
420			100	0	no			no	"	1			4 00			16
546		510	50	50	"		5 00	"	"	1				1	\$5 00	10
841	270	265	0	0	"		6 00	yes	"	1						21
286	10		0	0	"			no	"				3 75			17
786		786	0	0	2,500	1,000		yes	organ		3					14
182			*	10	no			no	none				*			18
409		409	0	0	800	800		yes	organ	1						15
130			*	0	no			no	none				*			15
585	0		150	0	"			"	"				4 00			14
468	0		0	0	"			"	"				3 50			15
361	0	361	0	0	"		6 00	"	"	1			*			14
95	0		*	0	"			"	"				*			15
409	0	409	0	0	"		8 00	yes	"				*			11
800	0		*	0	"			no	"				*			14
364	0		*	0	"			"	"				*			15
390	0		*	0	"			"	"				3 50			18
186	0		*	0	"			"	"				*			9
278	0		0	0	"			"	"				3 50			11
401	0	401	0	0	"		6 00	yes	"							18
312	0	312	0	0	"		5 00	"	piano							12
1,348	0	1,008	150	150	"		10 00	"	none	1						14
441	11	312	0	0	1,000	350		"	"							15
478	0	450	0	0	no		8 75	no	"	1				2,500		14
520			0	0	"			"	"	1	1		4 00			18
205	0		*	0	"			"	"				*			18
390		390	50	0	800			yes	"							18
280		250	0	0	500	75		no	"	1			*			18
282			*	0	no			"	"				*			10
860		860	0	0	1,500	500		yes	"	1						18
711	80	525	60	0	500	200		"	"	1						19
344	0	350	0	0	no		4 00	no	"							12
489	0	400	0	0	400			yes	"	1						14
308	0		0	0	no			no	"				8 00			18
374	0		0	0	"			"	"				3 50			18
341		341	0	0	800	500		yes	"	1				200		19
468	0		*	0	no			no	"	1			8 00			14
280	0		0	0	"			"	"				*			12
688	400	688	0	0	2,000			yes	"	2				2	10 00	18

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	No. in school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Foreman finisher	35	Holland	Holland	m	1	0	2	12	2½	12	29		2 25 d
Finisher	15	Michigan	"	s	..	..	0	2	2	10½	29	no work	5 00 w
Lugger	22	Holland	"	s	..	..	0	4	½	11	26	"	7 50 w
Finisher	23	Michigan	Canada	s	..	..	0	6	10m	8	104	"	1 50 d
"	26	N. J.	U. S.	m	0	0	1	1½	1½	10	52	"	9 75 w
PENINSULAR FURNITURE CO.													
Machine hand	12	Holland	Holland	s	..	..	0	5 d	5 d	½	..	first work	1 50 "
"	40	"	"	m	1	0	2	5	5	9½	72	no work	2 00 d
Packer	29	Michigan	U. S.	s	..	..	0	5m	8m	11½	18	"	1 25 "
Machine hand	22	Holland	Holland	s	..	..	0	7	2	9½	59	"	1 50 "
"	30	"	"	m	1	0	2	15	8½	9½	59	"	9 50 w
"	30	"	"	s	..	..	0	1½	1½	9	78	"	1 15 d
Finisher	19	"	"	s	..	..	0	2w	2w	12	..	"	3 50 w
Machine hand	32	Ocean	Germany	m	0	0	1	12	2	10	52	no work	9 75 "
Finisher	26	Holland	Holland	s	..	..	0	6	8	12	..	"	6 25 "
Cabinet-maker	31	"	"	s	..	..	2	2½	2½	10	52	no work	7 00 "
Laborer	18	U. S.	"	s	..	..	1	4m	4m	4	..	first work	2 00 "
Machine hand	48	"	France	m	0	0	1	32	8w	10	52	no work	1 25 d
Laborer	13	Holland	Holland	s	..	..	0	1w	1w	½	..	first work	1 50 w
Machine hand	14	"	"	s	..	..	0	5m	5m	5	..	"	2 70 "
Cabinet-maker	57	"	"	m	6	2	4	5w	5w	12	..	"	70 d
Machine hand	34	Germany	Germany	m	2	0	3	17	4	10	52	no work	9 75 w
Sand-paperer	14	Holland	Holland	s	..	..	0	1w	1w	½	..	first wrk in U.S.	2 00 "
Finisher foreman	25	"	"	s	..	..	0	8	1	12	..	"	2 00 d
Cabinet-maker	26	"	"	m	2	0	3	4	4	11½	18	no work	10 00 w
Finisher	28	Michigan	England	s	..	..	0	8	1w	8	104	"	1 50 d
Sand-paperer	15	Holland	Holland	s	..	..	0	2w	2w	½	..	first work	2 00 w
Cabinet-maker	18	"	"	s	..	..	0	5	½	8½	91	no work	75 d
Machine hand	32	"	"	s	..	..	0	10	1	10	52	"	1 75 "
Saw-filer	27	"	"	m	2	1	3	7	5	10	52	"	1 75 "
Asst. Supt.	31	New York	U. S.	m	0	..	3	17	5	12	..	"	66 25 m
Machine hand	20	Holland	Holland	s	..	..	0	7	2	6	156	no work	1 10 d
"	12	"	"	s	..	..	0	1	1	11½	19	"	3 00 w
"	13	Michigan	U. S.	s	..	..	0	1w	1w	½	..	first work	2 00 "
Finisher	22	Holland	Holland	s	..	..	0	8	2	9	78	no work	9 00 "
Cabinet-maker	19	Michigan	"	s	..	..	0	8	6w	6	156	sick and no w'rk	3 25 "
"	25	Holland	"	m	1	0	2	8	5	10½	39	no work	1 75 d
Finisher	16	Illinois	Germany	s	..	..	0	1½	1	11½	12	"	4 50 w
Trimmer	24	Holland	Holland	s	..	..	0	1	2m	6	156	"	9 00 "
Machine hand	21	Germany	Germany	s	..	..	0	5	5	10	52	"	1 85 d
Finisher	23	Canada	Canada	s	..	..	0	10	4	11	26	fire	1 35 "
Machine hand	45	Indiana	U. S.	m	4	1	5	20	1½	8	104	sick and no w'rk	1 50 "
"	17	Michigan	"	s	..	..	0	1½	1½	8	104	no work	75 "
Engineer	26	Penn.	"	m	1	0	2	15	8½	12	..	"	1 75 "
Cabinet-maker	31	Holland	Holland	m	1	0	2	8	1½	10	52	no work	10 00 w
GRAND RAPIDS CABINET CO.													
Finisher	25	Holland	Holland	m	2	0	3	11	1	11	26	"	3 25 "
"	44	"	"	m	2	0	3	22	½	8	104	"	1 50 d
Machine hand	30	"	"	m	3	0	3	15	3w	11	26	"	2 00 "
"	38	New York	U. S.	m	2	..	3	20	6w	11½	12	"	2 00 "
Laborer	34	Canada	Canada	s	..	..	0	1½	1½	10	52	"	1 25 "
Machine hand	30	"	"	m	0	0	1	6	½	11	26	"	1 25 "
"	29	Michigan	Holland	s	..	..	0	7m	7m	12	..	"	1 25 "

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If board 'ug cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$702		\$365	0	0	\$1,200	\$300		yes	none	1					18
237			*	0	no			no	"						13
337			0	0	"			"	"						17
312			0	0	"			"	"		\$3 50				14
497		497	0	0	"		\$6 00	"	"						14
3			*	0	0			"	"						12
481		400	0	0	2,000			"	"	1					15
374			\$100	0	no			"	"		3 00				13
380			75	0	"			"	"		3 00				15
401	0	351	50	0	2,800	1,000		yes	"	1					14
276			0	0	no			no	"		3 50				15
182	0		*	0	"			"	"						14
422		400	0	0	"			"	"	1					16
429	0		0	0	"			"	"	1	3 50				13
308		308	0	0	"		6 00	"	"	1					14
35			*	0	0			"	"		*				13
325		250	0	0	"		7 00	"	"						16
3			*	0	0			"	"		*				13
53			*	0	0			"	"		*				13
418	0	300	0	0	600	300		"	"						12
422		400	0	0	no		7 00	"	"		*				14
2			*	0	0			"	"		*				14
624			225	\$225	"			"	"		3 50				16
498	0	365	0	0	"		6 00	yes	"	2					11
312			*	0	0			no	"		*				15
4			*	0	0			"	"		*				14
166			0	0	"			"	"		3 50				15
455	350		25	25	"			"	"	1	3 50				13
455		300	0	0	900	170		yes	"	1					15
795		525	250	0	no		7 00	"	organ	1 3 1		1,000	2	\$8 00	14
172			*	0	0			no	none		*				13
146			*	0	0			"	"		*				12
3			*	0	0			"	"		*				11
351			*	0	0			"	"		*				14
214			*	0	0			"	"		*				14
478		478	0	0	1,000	500		yes	organ						13
224			*	0	no			no	none						10
234	0		0	0	"			"	"		4 00				9
351			0	0	"			"	"		3 50				15
396			0	0	"			"	"		3 50		2	5 00	13
312		312	0	0	"		8 00	yes	"		*				10
166			*	0	0			no	"						15
546		396	150	0	1,000	500		yes	"			1,000	1	3 00	13
433	0	433	0	0	no		5 00	"	"						14
393		393	0	0	800	400		"	"						14
312	50	312	0	0	no			no	"	1					14
572		572	0	0	1,000	500		yes	"						14
596		596	0	0	no		10 00	"	"						15
325			0	0	"			no	"		3 50				14
357	58	357	0	0	"		6 00	"	"	1					12
390			0	0	"			"	"		3 50				18

* Gives wages to parents and lives at home.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

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TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$341	-----	\$341	0	0	no	-----	\$5 00	no	none	-----	1	-----	-----	\$2,000	-----	-----	11
1,183	-----	552	\$341	0	no	-----	8 00	yes	"	1	1	-----	-----	1,000	-----	-----	14
488	-----	400	0	0	"	-----	7 00	no	"	-----	-----	-----	-----	-----	-----	-----	19
468	-----	200	0	0	"	-----	-----	"	violin	1	-----	-----	\$3 50	-----	-----	-----	12
429	-----	150	0	0	"	-----	-----	"	none	-----	-----	-----	-----	-----	-----	-----	13
156	-----	0	0	0	"	-----	-----	"	"	-----	-----	-----	2 50	-----	-----	-----	13
1,080	-----	900	0	0	"	-----	15 00	-----	-----	-----	-----	-----	-----	-----	-----	-----	13
507	-----	400	50	\$100	"	-----	5 00	-----	clar'nt	-----	-----	-----	-----	2,000	1	\$5 00	14
237	0	0	0	0	"	-----	-----	"	none	-----	-----	-----	8 25	-----	1	5 00	13
546	0	846	200	0	"	-----	-----	"	-----	-----	-----	-----	8 25	-----	-----	-----	14
312	-----	0	0	0	"	-----	-----	"	"	-----	-----	-----	8 00	-----	-----	-----	10
780	\$50	400	0	0	"	-----	10 00	yes	"	1	-----	-----	-----	500	-----	-----	14
439	-----	0	0	55	"	-----	-----	no	"	1	-----	-----	5 00	-----	-----	-----	13
528	-----	350	0	0	"	-----	-----	"	"	-----	1	-----	-----	-----	-----	-----	15
465	60	0	0	85	"	-----	-----	"	"	-----	-----	-----	3 50	-----	1	5 00	10
240	-----	*	0	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	16
156	-----	0	0	0	"	-----	-----	"	"	-----	-----	-----	2 50	-----	-----	-----	13
390	-----	390	0	0	"	-----	6 00	-----	organ	1	-----	-----	-----	-----	-----	-----	8
347	-----	0	0	0	"	-----	-----	none	none	-----	-----	-----	4 00	-----	-----	-----	18
468	-----	468	0	0	\$1,500	\$300	yes	piano	1	1	-----	-----	-----	2,500	1	5 00	21
438	25	438	0	0	no	-----	8 50	"	none	-----	-----	-----	-----	-----	-----	-----	17
520	-----	520	0	0	"	-----	10 00	no	"	-----	-----	-----	-----	-----	-----	-----	15
292	-----	292	0	0	"	-----	8 00	yes	"	-----	-----	-----	-----	-----	-----	-----	12
429	-----	429	0	0	"	-----	-----	-----	"	-----	-----	-----	-----	-----	-----	-----	13
280	-----	0	0	0	"	-----	-----	no	"	-----	-----	-----	8 50	-----	-----	-----	18
384	-----	384	0	0	1,400	-----	-----	yes	"	-----	1	-----	-----	2,500	1	5 00	17
702	-----	0	0	1,700	no	-----	-----	no	"	-----	-----	-----	8 50	-----	-----	-----	14
390	-----	390	0	0	"	-----	5 00	yes	"	-----	-----	-----	-----	-----	-----	-----	12
159	-----	*	0	0	"	-----	-----	no	"	1	1	-----	4 50	-----	-----	-----	13
650	-----	0	0	0	"	-----	-----	"	"	-----	-----	-----	8 00	-----	-----	-----	18
174	-----	0	0	0	no	800	500	yes	organ	1	1	-----	-----	-----	-----	-----	14
384	0	384	0	0	no	-----	6 00	no	organ	1	-----	-----	-----	-----	-----	-----	16
416	-----	350	0	0	"	-----	-----	"	"	-----	-----	-----	-----	-----	-----	-----	14
747	-----	0	0	0	"	-----	-----	"	none	1	1	-----	4 50	-----	-----	-----	21
780	-----	450	100	100	"	-----	10 00	yes	"	1	2	-----	-----	-----	-----	-----	21
624	-----	624	0	0	"	-----	9 00	no	piano	2	1	4	-----	-----	-----	-----	19
195	-----	*	0	0	"	-----	-----	"	none	-----	2	-----	*	-----	-----	-----	13
134	-----	0	0	0	"	-----	-----	"	"	-----	-----	-----	2 75	-----	-----	-----	13
936	-----	250	500	0	"	-----	5 00	"	piano	1	1	-----	-----	-----	-----	-----	16
468	-----	468	0	0	"	-----	7 00	yes	none	1	-----	-----	-----	-----	-----	-----	14
167	-----	*	0	0	"	-----	-----	no	"	-----	-----	-----	*	-----	-----	-----	15
500	-----	0	0	0	"	-----	-----	"	"	-----	-----	-----	4 00	-----	-----	-----	15
658	-----	558	0	0	"	-----	12 00	yes	organ	1	-----	-----	-----	3,000	-----	-----	14
520	-----	200	0	0	"	-----	-----	no	none	-----	-----	-----	3 25	-----	-----	-----	21
234	-----	0	0	0	"	-----	-----	"	"	-----	-----	-----	2 00	-----	-----	-----	16
628	-----	628	0	0	"	-----	-----	"	"	1	1	-----	9 00	-----	-----	-----	14
1,200	-----	500	0	0	3,000	600	yes	"	"	1	-----	-----	-----	-----	1	6 00	14
270	-----	0	0	0	no	-----	-----	no	"	-----	-----	-----	3 50	-----	-----	-----	12
12	-----	*	0	0	"	-----	-----	"	"	-----	-----	-----	*	-----	-----	-----	12
229	-----	0	0	0	"	-----	-----	"	"	-----	-----	-----	3 50	-----	-----	-----	14
458	-----	0	0	0	"	-----	-----	"	"	-----	-----	-----	5 00	-----	-----	-----	16
558	-----	458	75	70	"	-----	6 00	"	organ	1	-----	-----	-----	-----	-----	-----	10
174	-----	50	50	70	"	-----	-----	"	none	-----	-----	-----	†	-----	-----	-----	16

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—Showing Individual Reports.

			Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
			H	1	1	3	15	6w	12		first w'rk	\$15 00 w
			H	1	0	0	15	1w	8	20	no work	2 50 "
			H	1	0	0	15	1w	11	20	no work	12 00 "
			H	0	0	0	10	10w	10	30	no work	2 00 d
			H	0	0	1	10	10w	10	30	"	10 00 w
			H	1	0	3	10	8w	12	104	sickness	16 00 "
			H	1	1	3	8	1w	12			8 00 "
			H	1	0	2	8	8	11	26	no work	16 00 d
			H	1	0	0	8	8	11	13	shut down	1 50 d
			H	0	0	0	5	8	11	25	no work	10 50 w
			H	0	0	0	10	10	12		no work	11 00 "
			H	0	0	0	10	10	12			1 25 d
			H	0	0	0	4	1w	12			8 25 w
			H	0	0	1	9	2m	11	13	shut down	1 50 d
			H	0	0	0	6	2	11	8	no work	1 50 "
			H	0	0	0	2	3	12			1 75 "
			H	2	2	0	4m	8m	11			8 75 w
			H	0	0	1	5	3	12			1 75 d
			H	0	0	0	3	3	11	13	shop closed	1 50 "
			H	7	2	6	7	6	11	13	"	1 00 "
			H	0	0	0	1w	2	11	13	no work	4 50 w
			H	0	0	0	10	4	11	18	"	2 00 d
			H	0	0	0	1	1	12			4 50 w
			H	0	0	0	1	4m	12			8 25 "
			H	0	0	0	4	1w	10	52	no work	8 25 "
			w'r	0	0	0	7	2	11	19	"	1 50 d
Laborer	23	Holland	Holland	m	8	0	4	2w	2	11	not in U. S.	10 00 w
Machine hand	27	U. S.	England	s			0	2w	3	18	no work	1 00 d
Laborer	58	Holland	Holland	m	9	3	5	3	12			1 50 "
Finisher	18	"	"	s			0	3	2	11	no work	1 25 "
"	16	"	"	s			0	1	1	10		4 50 w
WOLVERINE CHAIR CO.:												
Cabinet-maker	52	Ireland	Ireland	m	4	1	5	22	1		high water	18 50 "
Chair-maker	49	"	"	m	8	4	9	25	1	52	no work	18 00 "
Carver	38	Ohio	France	m	0	0	1	24	1	104	high water	8 30 d
Chair-maker	40	Mass.	U. S.	m	2	1	3	18	1	52	high water	2 00 "
Finisher	24	Michigan	Germany	s			0	7	5m	78	no work	1 50 "
"	42	Canada	Canada	m	0	0	2	15	4	26	"	2 00 "
Cabinet-maker	32	Germany	Germany	m	1	1	2	18	1m	52	"	2 00 "
Fireman	19	Holland	Holland	s			0	7m	7m			7 50 w
Cabinet-maker	33	Michigan	U. S.	m	0	0	1	1	1	78	no work	2 00 d
Finisher	24	Ireland	Ireland	s			0	10	2d	11	"	2 00 w
Machine hand	55	Holland	Holland	m	4		4	7	7	18	"	8 00 "
"	53	Scotland	Scotland	m	2	0	1	30	2	52	"	1 75 d
Finisher	20	Holland	Holland	s			0	4	1	52	"	1 25 "
"	18	"	"	s			0	2	1	7	"	6 00 w
"	20	"	"	s			0	5	2w		"	1 25 d
Machine hand	20	New York	U. S.	w'r	1	0	1	8	1	52	no work	1 75 "

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$790		\$360	\$100	0	no		\$13 00	yes	none		1	1	*				17
82			0	0	no			no	"								14
573	\$18	865	0	0	"		10 00	no	"								18
838		938	0	0	\$1,000	\$300		yes	"					\$3,000			17
455			0	0	no			no	"				\$3 00				14
728		728	0	0	700			yes	"		1	1		2,000	1	\$4 00	18
277			0	0	no			no	"				8 00				16
832		800	50	0				"	"					1,000	1	25 00	18
824		400	0	0	4,000	800		yes	melod		1			2,000	1	5 00	8
381		381	0	0	550			"	none		1						11
448			75	0	no			no	"				8 50				14
500			100	0	"			"	"				8 50				18
572	refuse	864	0	0	"		7 50	yes	"		3						10
890			0	0	"			no	"				8 50				10
188			*	0	"			"	"				*				12
448			*	0	"			"	"				*				10
408	0	818	150	0	"		6 50	yes	"					1,000	1	4 00	18
458			50	45	"			no	"				4 00				14
548			250	0	"			"	"		3	1	4 50				10
196			150	0	"			"	"				†				14
545		800	0	0	"		8 00	yes	piano		1	1		2,000	1	12 50	15
468	10	220	0	100	"		5 50	no	organ								14
308			*	0	"		8 00	yes	none		1		*				14
508		508	0	0	"			"	"								11
224			*	0	"			no	"				*				14
568	0		50	0	"			"	"			1	4 00				14
224			*	0	"			"	"				*				18
168			*	0	"			"	"				*				18
141			100	0	"			"	"				*				11
488			100	200	"			"	"		1		8 50				20
498	400	400	50	0	1,000	450		yes	"		1						10
324	25		0	0	no			no	"				8 00				13
448			25	500	"			"	"				8 50				12
440	0	850	0	0	"		7 00	yes	"				*				14
224	0		*	0	"			no	"				*				10
168			*	0	"			"	"				*				9
708	0	708	0	0	"		13 00	yes	piano		1			2,000			18
568		563	0	0	"		8 00	"	none		1						14
686		686	0	0	"		7 00	"	"		1			2,000			12
580		580	0	0	800	350		"	organ		1						14
351			0	0	no			no	none				8 75				16
572		572	0	0	"		11 00	"	"		1	1					21
580	39	520	0	0	"			"	"				*				19
300			*	0	"			"	"								13
408		468	0	0	1,000	900		yes	"		1						18
351			0	0	no			no	"				4 00				14
399	200	399	0	0	800			yes	"								13
455		455	0	0	no		10 00	"	"		1			3,000			20
826			*	0	"			no	"				*	180			14
306			*	0	"			"	"				*				18
390	0		0	0	"			"	"				8 00				14
455		218	0	0	"		11 00	yes	"		1	1					16

* Given wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 1.—CONTINUED.—*Showing Individual Reports.*

				Married or single.	No. of children in family.	No. of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during	Cause for loss of time.	Wages received.
				m			0	8	3	10½		no work	\$13 00 w
				m			0	20	1½	10		"	2 25 d
				m			4	17	2½	11		"	2 25 "
VALLEY CITY RATTAN WORKS.													
Chair-maker	23	Canada	U. S.	m	0	0	2	7	3	11½		shop closed	3 00 "
"	22	Indiana	"	s			0	2½	1m	12		"	12 00 w
"	17	Germany	Germany	s			0	2	3	10½		no work	1 25 d
"	22	Canada	"	m	4	0	5	8	1	12		"	2 00 "
"	20	Holland	Holland	m	9	4	10	½	½	12		"	1 25 "
"	16	Germany	Germany	s			0	1½	1½	12		"	3 50 w
Book-keeper	22	Iowa	Spain	w'r	0	0	0	1½	1½	12		"	1 00 d
Chair-maker	21	Michigan	U. S.	m	0	0	0	2	3	8		no work	5 50 w
"	21	Holland	Holland	s			0	4m	4m	12		"	4 50 "
"	13	Michigan	Germany	s			0	3	3	11½		shop closed	4 50 "
"	19	New York	U. S.	s			0	3	3	11½		"	4 00 "
"	16	Michigan	Germany	s			0	1	1	10½		no work	5 00 "
"	16	"	"	s			0	1	1	11½		shop closed	8 00 "
VALLEY CITY TABLE CO.													
Cabinet-maker	19	Michigan	Holland	s			0	2	7w	11½		no work	6 00 "
Finisher	34	Ohio	U. S.	m	1	1	2	11	1	11½		shop closed	2 00 d
Laborer	26	Michigan	Holland	m	2	0	3	½	½	11		no work	1 25 "
Finisher	26	Ohio	U. S.	s			0	7	4m	10		"	7 50 w
"	23	Ireland	Ireland	s			0	4½	2w	11½		"	1 25 d
Machine hand	36	Michigan	U. S.	m	0	0	1	20	1	11		"	2 00 "
Cabinet-maker	30	New York	"	s			0	12	4	11		"	1 75 "
"	17	Germany	Germany	s			0	3	5m	11½		"	1 25 "
Finisher	19	Holland	Holland	s			0	2	5m	10		"	1 00 "
Packer	46	New York	U. S.	m	0	0	1	1w	1w	12		"	2 00 "
"	37	"	"	m	1	0	2	1	1	11		shut down	15 00 w
Superintendent	39	Michigan	"	m	2	2	3	1	1	12		"	15 00 "

TABLE NO. 1.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$591			0	0	no			no	none	Daily papers.	Weekly papers.	Magazines.	\$4 00				12
586			\$160	0	"			"	"	1			4 00				13
648	\$15	\$400	0	0	\$1,500	\$500		"	"	1					1	4 00	10
858		260	200	\$200	no		\$6 00	"	"	1							10
824			0	0	"			"	"				4 00				12
841			20	0	"			"	"				3 50				14
824	20	490	125	0	"		6 50	yes	"	1							13
824	0	624	0	0	"		5 50	no	"	6-w				\$200			12
182			*	0	"			"	"				*				14
812			0	0	"			"	"				2 50	200			20
191		191	0	0	"		6 00	"	"		2		1 50				19
224			0	0	"			"	"								16
224			*	0	"			"	"				*				14
190			*	0	"			"	"				*				15
227			*	0	"			"	"				*				15
149			*	0	"			"	"				*				15
336			*	0	"			"	"				*				16
611		611	0	25	900			yes	organ	1							23
357		357	0	0	no		4 50	"	none								16
385			0	0	"			no	"				8 00				18
366			0	0	"			"	"				5 00				14
572		572	0	0	1,500	500		yes	"	1							15
500			0	0	no			no	"				4 00				14
368			*	0	"			"	"				*		1	5 00	14
280			*	0	"			"	"				*				17
624		800	150	0	650	375	10 00	yes	organ	1	1						12
715		715	0	0	1,000	425		"	"	1	1			1,000			12
780		1,000	0	0	2,000	250		"	none	1	1			2,500	1	5 00	12

* Gives wages to parents and lives at home.

TABLE No. 2.—*Showing the totals of*

Name of Firm.	Number of children attending school.	Total number of persons dependent for support.	Average number of months employed.	Total annual earnings.	Total amount of family expenses during the year.
Widdiscomb Furniture Co.....	188	756	10.8 +	\$148,749	\$91,384
Phoenix Furniture Co.....	161	627	10.8 +	164,884	88,080
Nelson, Matter & Co.	192	689	10.5 +	147,448	84,888
Berkey & Gay Furniture Co.....	187	581	10.7 +	121,171	67,946
Blossell Carpet Sweeper Co. { Males.....	30	89	10.6 +	42,905	15,186
Females.....	-----	1	9.7 +	6,546	649
Grand Rapids Chair Co.... { Males.....	53	194	10.8 +	51,718	26,407
Females.....	-----	-----	9.7 +	2,547	-----
Grand Rapids Refrigerator Co.....	11	126	10.4 +	42,020	17,765
McCord & Bradfield Furniture Co.....	11	228	10.0 +	48,855	25,054
Oriel Cabinet Co.	17	342	11.0 +	64,583	38,994
Sligh Furniture Co.	41	165	11.1 +	46,600	23,548
Grand Rapids School Furniture Co.....	68	281	10.7 +	55,743	33,989
Kent Furniture Manufacturing Co.....	42	187	11.1 +	38,724	23,800
Wm. A. Berkey Furniture Co.....	45	150	10.0 +	44,536	21,688
Grand Rapids Furniture Co.....	31	131	10.0 +	25,164	14,084
New England Furniture Co.....	14	99	10.5 +	27,009	14,810
M. L. Sweet.....	25	74	9.5 +	16,454	9,202
Folding Chair and Table Co.....	18	70	10.6 +	22,129	11,892
Stowe & Davis Furniture Co.....	12	60	11.2 +	18,833	8,580
Worden Furniture Co.....	8	51	10.7 +	15,805	7,319
Grand Rapids Veneer Works.....	10	55	11.3 +	13,203	6,967
Universal Tripod Co.....	12	58	10.1 +	15,908	8,644
Peninsular Furniture Co.....	8	85	8.8 +	11,329	5,218
Grand Rapids Cabinet Co.....	8	41	10.8 +	15,824	9,207
Grand Rapids Parlor Furniture Co.....	6	41	10.8 +	16,561	8,054
Z. E. Allen.....	7	22	11.4 +	10,287	3,181
Wolverine Chair Co.....	9	22	10.3 +	9,371	5,501
Valley City Rattan Works { Males.....	4	17	11.7 +	3,565	1,888
Females.....	-----	-----	10.8 +	1,234	191
Valley City Table Co.....	3	12	11.1 +	5,812	2,555
Totals.....	1,373	4,978	10.5 +	\$1,260,807	\$671,638

Table No. 1 by firms in Grand Rapids.

Total amount saved during the year.	Total amount at interest or in bank.	Number owning homes.	Total value of homes.	Number of homes mortgaged.	Total amount of mortgages.	Number renting.	Average monthly rental.	Number boarding.	Average cost per week for board and room.	Total number having life insurance.
28,513	26,000	93	\$102,160	55	\$26,575	105	\$5 92	116	\$3 79	■
9,368	14,244	104	128,406	66	31,635	87	6 48	92	3 89	49
6,902	12,375	116	156,575	73	36,069	80	7 07	80	3 98	45
4,949	5,060	74	77,726	47	22,786	64	7 34	69	3 99	25
2,270	2,222	17	23,700	9	5,175	15	7 80	35	3 66	18
402	75					1	12 00	8	3 68	1
1,634	1,900	30	28,465	21	5,745	27	6 49	40	3 80	8
666	2,825	16	20,900	12	6,990	29	7 35	34	3 52	11
1,234	1,435	31	24,500	22	8,270	33	5 90	35	3 59	12
5,580	6,630	37	41,850	28	12,437	29	6 40	41	3 79	20
490	1,263	22	23,675	■	9,425	27	5 96	30	3 64	6
1,498	2,785	30	33,500	24	10,550	41	6 94	27	4 06	14
1,949	1,225	26	29,775	19	8,660	34	■ 01	21	3 67	4
1,770	1,525	14	16,120	11	4,575	30	6 65	38	4 01	10
885	1,625	14	14,130	10	4,225	23	5 60	17	3 26	8
1,818	974	12	10,500	11	5,725	21	6 11	20	3 37	2
572	430	14	17,000	7	2,475	8	7 06	16	3 26	5
1,240	880	12	25,160	8	5,800	12	7 30	16	3 36	7
1,758	400	8	7,800	6	1,975	12	6 87	14	3 50	2
983	916	10	12,800	8	5,206	7	5 35	12	3 87	1
1,770	1,050	2	8,100	3	416	14	7 45	22	3 75	3
400	160	11	11,200	8	8,725	4	6 72	9	3 50	4
675	250	6	7,300	6	2,470	7	6 57	10	3 45	2
1,241	1,800	4	4,700	3	1,200	13	7 95	14	3 41	6
1,075	170	5	11,300	4	2,700	9	8 55	13	3 22	5
1,000	845	2	1,550	1	450	6	7 08	9	3 66	2
150		4	8,900	3	1,750	8	11 00	6	3 73	4
855	200					2	6 00	3	3 33	2
150	25	5	6,060	4	1,550	2	6 00	1	1 50	2
						2	7 25	■	4 00	2
\$31,067	\$70,598	718	\$650,670	422	\$220,517	754	\$5 65	844	■ 71	333

* All give wages to parents and live at home.

TABLE NO. 4.—Showing number canvassed who have families, number owning and number renting homes, annual earnings of renters and the percentage of earnings paid for rent, etc., in Grand Rapids.

Name of Firm.	Location.	Number of families canvassed.	Number owning homes.	Percent of families owning homes.	Number renting homes.	Percent of families renting homes.	Total annual earnings of renters.	Total annual family expense of renters.	Total annual rent.	Percent of earnings paid for rent.	Percent of family expense paid for rent.
.....	Grand Rapids..	190	98	.46+	106	.53+	\$44,386 00	\$49,714 00	\$7,464 00	.15+	.17+
.....	"	191	104	.54+	87	.45+	44,299 00	37,516 00	6,719 40	.15+	.17+
.....	"	196	116	.56+	80	.41+	42,772 00	38,939 00	6,795 60	.15+	.20+
.....	"	188	74	.52+	84	.46+	36,367 00	29,570 00	5,657 20	.15+	.19+
.....	"	83	17	.50+	16	.48+	8,745 00	7,903 00	1,546 00	.17+	.20+
.....	"	57	30	.52+	27	.47+	14,173 00	13,033 00	2,103 96	.14+	.16+
.....	"	44	15	.34+	29	.65+	12,153 00	11,899 00	2,659 00	.21+	.22+
.....	"	64	31	.48+	33	.51+	14,243 00	12,673 00	2,340 00	.16+	.18+
.....	"	66	37	.56+	29	.43+	17,865 00	15,072 00	2,229 00	.12+	.14+
.....	"	49	32	.64+	27	.55+	12,673 00	11,936 00	1,963 00	.15+	.16+
.....	"	71	30	.42+	41	.57+	22,636 00	19,214 00	3,417 00	.15+	.17+
.....	"	60	26	.43+	34	.56+	15,081 00	13,496 00	2,466 00	.16+	.18+
.....	"	44	14	.31+	30	.68+	15,999 00	13,608 00	2,396 40	.15+	.18+
.....	"	37	14	.37+	23	.63+	9,060 00	8,354 00	1,543 00	.17+	.18+
.....	"	33	13	.36+	21	.63+	9,105 00	7,799 00	1,543 00	.16+	.19+
.....	"	22	14	.63+	8	.36+	3,720 00	3,636 00	678 00	.18+	.19+
.....	"	26	13	.50+	12	.45+	5,720 00	4,903 00	1,063 40	.16+	.21+
.....	"	20	8	.40+	12	.60+	6,366 00	5,496 00	940 00	.15+	.18+
.....	"	17	10	.58+	7	.41+	3,747 00	3,545 00	450 00	.12+	.13+
.....	"	18	2	.12+	14	.87+	7,461 00	5,797 00	1,364 00	.16+	.21+
.....	"	19	11	.57+	8	.42+	4,070 00	3,978 00	545 00	.15+	.16+
.....	"	13	6	.46+	7	.53+	3,068 00	2,583 00	553 00	.17+	.21+
.....	"	17	4	.23+	13	.76+	7,397 00	5,969 00	1,243 00	.17+	.20+
.....	"	14	5	.36+	9	.64+	5,603 00	3,893 00	924 00	.16+	.23+
.....	"	8	3	.26	6	.75	3,062 00	2,350 00	310 00	.10+	.13+
.....	"	10	4	.40	6	.60	2,433 00	3,194 00	793 00	.23+	.24+
.....	"	4	.....	.....	4	1.00	2,297 00	1,574 00	288 00	.12+	.16+
.....	"	7	5	.71+	2	.28+	361 00	657 00	174 00	.17+	.26+

TABLE No. 5.—Showing by firms in Grand Rapids, the number canvassed 19 years of age and over, the nationality, conjugal relations, etc.

Name of Firm.	Location.	Number canvassed.	Number born in U. S.	Number born of American parents.	Number born in U. S. of foreign parents.	Number foreign born.	Number married.	Number single.	Number supporting others than themselves.	Number of persons so supported.	Kind of work.		Average age began work.	Read.		Write.	
											Hand.	Machine.		Yrs.	No.	Yrs.	No.
Widdcomb Furniture Co.	Grand Rapids	226	62	26	24	226	208	90	205	754	226	72	18.3+	230	8	229	8
Phoenix Furniture Co.	"	230	84	45	39	201	196	88	195	626	249	31	13.6+	203	17	203	18
Nelson, Matter & Co.	"	239	85	48	43	174	192	67	194	671	225	24	13.6+	228	23	229	30
Berkey & Gay Furniture Co.	"	208	61	30	31	157	141	67	145	535	131	27	13.8+	184	24	179	29
Bissell Carpet Sweeper Co.	"	71	35	17	18	36	31	40	32	87	20	31	14.1+	66	5	66	6
	"	14	8	5	2	6	1	13	1	1	11	3	17.8+	14	14	14	14
Grand Rapids Chair Co.	"	94	13	8	5	81	57	37	57	194	93	2	13.8+	83	13	81	13
Grand Rapids Refrigerator Co.	"	73	35	27	6	38	46	27	44	118	54	17	15	63	1	63	1
Grand Rapids Refrigerator Co.	"	109	37	20	7	82	65	44	65	216	101	8	13.8+	100	5	100	6
	"	110	29	14	15	81	70	40	68	229	107	8	13.8+	106	2	106	2
Co.	"	94	20	13	7	64	53	31	55	155	69	15	13.7+	74	10	70	14
Co.	"	90	49	36	13	50	73	23	72	250	78	31	14.2+	96	6	92	7
	"	76	17	11	6	59	56	20	60	185	67	9	13.6+	74	2	74	2
	"	77	22	19	10	48	50	27	49	149	64	13	13.7+	73	4	73	4
	"	51	14	10	4	37	38	13	38	120	36	15	12.7+	45	6	44	7
	"	54	23	17	6	31	35	16	37	96	43	13	13.7+	53	1	53	1
	"	83	15	12	3	13	23	11	23	73	21	12	13.3+	31	2	31	2
	"	41	24	15	9	17	27	14	27	66	27	14	14.3+	41	3	39	3
	"	33	7	4	3	26	18	15	19	55	21	12	13.5+	30	2	30	2
	"	31	16	8	3	15	20	11	16	46	26	3	13.3+	29	2	29	2
Grand Rapids Veneer Works	"	40	29	13	16	11	20	20	18	63	20	20	13.5+	27	3	27	3
Universal Tripod Co.	"	31	5	2	3	26	19	13	19	51	23	5	13.7+	31	3	30	3
Peninsular Furniture Co.	"	26	6	4	2	20	13	13	13	33	14	12	13.6+	20	1	20	1
Grand Rapids Cabinet Co.	"	31	10	8	2	21	21	10	21	20	23	9	14.1+	20	1	20	1
Grand Rapids Parlor Furniture Co.	"	27	20	10	10	7	15	12	17	35	26	1	14.9+	27	1	27	1
Z. E. Allen	"	17	8	4	4	9	9	8	8	23	12	5	12.7+	17	1	17	1
Wolverine Chair Co.	"	17	6	3	3	11	11	6	11	23	12	5	15.1+	15	1	15	1
Valley City Rattan Works	"	5	3	1	1	3	4	1	3	17	5	1	13.4	4	1	4	1
Valley City Table Co.	"	9	3	1	1	1	6	3	6	13	3	1	17.5	3	1	3	1
	"	9	3	1	1	1	6	3	6	13	3	1	18	3	1	3	1

TABLE No. 6.—Showing by firms in Grand Rapids the number canvassed between the ages of 16 and 19 years, the nationality, etc.

Name of Firm.	Location.	Number Canvassed.	Number born in U. S.	Number born of Amer-ican parents.	Number born in U. S. of foreign parents.	Number foreign born.	Average age began work.	Kind of work.		Read.		Write.	
								Hand.	Mechan-ical.	Yes.	No.	Yes.	No.
Widdcomb Furniture Co.	Grand Rapids	58	18	5	8	45	13.3+	40	18	58	2	57	1
Phoenix Furniture Co.	"	58	23	4	16	35	13.4+	49	9	55	2	56	2
Nelson, Matter & Co.	"	25	14	4	19	19	14.	23	18	33	2	30	1
Berkey & Gay Furniture Co.	"	17	13	2	10	5	13.3+	10	7	16	1	16	1
Blissell Carpet Sweeper Co.	"	23	23	2	21	10	13.3+	29	9	23	1	23	1
	"	11	8	3	3	8	14.5+	6	5	11	1	11	1
	"	17	6	2	4	11	13.4+	19	1	16	1	16	1
Grand Rapids Chair Co. { Males	"	13	3	1	2	10	13.3+	13	1	13	1	11	2
Grand Rapids Chair Co. { Females	"	28	20	6	14	18	8.1+	23	16	28	1	28	1
Grand Rapids Refrigerator Co.	"	11	3	1	1	9	12.3+	10	1	11	1	11	1
	"	11	5	2	3	6	14.4+	9	2	11	1	11	1
	"	19	13	2	11	6	13.4+	14	5	19	1	19	1
	"	10	6	5	1	4	14.	9	1	9	1	9	1
	"	15	7	4	8	8	13.	13	2	15	1	15	1
	"	17	10	4	6	7	12.8+	15	3	17	1	17	1
	"	16	7	3	4	9	13.7+	13	3	16	1	16	1
	"	11	3	2	1	8	12.	10	1	11	1	11	1
	"	10	5	1	4	5	12.3	5	5	10	1	10	1
	"	8	5	4	1	3	12.6+	4	4	8	1	8	1
	"	7	1	1	1	6	12.4+	3	3	7	1	7	1
	"	5	3	1	1	3	13.3	3	2	5	1	5	1
	"	1	1	1	1	1	15.	1	2	1	1	1	1
	"	6	3	1	2	3	12.3+	4	2	6	1	6	1
	"	5	3	1	1	2	12.5	3	1	5	1	5	1
	"	3	3	1	2	1	14.5+	3	1	3	1	3	1
	"	6	3	1	2	3	11.5	3	3	6	1	6	1
Z. E. Allen	"	2	2	1	1	1	14.	2	1	2	1	2	1
Wolverine Chair Co.	"	2	2	1	1	1	14.	2	1	2	1	2	1
Valley City Rattan Works	"	2	2	1	1	1	14.7+	2	1	2	1	2	1
Valley City Table Co.	"	4	4	1	3	1	15.6+	4	1	4	1	4	1
	"	3	1	1	1	1		3	1	3	1	3	1

TABLE No. 8.—*Reports from firms in Grand Rapids.*

Names of firms.	Whole number employed May 1, 1899.	Aggregate wages paid dur- ing the year.	Wholesale value of goods manufactured during the year.
Widdicomb Furniture Co.....	610	\$238,785	\$559,350
Phoenix Furniture Co.....	625	230,839	644,918
Nelson, Matter & Co.....		no report	
Berkey & Gay Furniture Co.....	375	200,000	500,000
Bissell Carpet Sweeper Co.....	211	120,000	350,000
Grand Rapids Chair Co.....	229	127,086	274,686
Grand Rapids Refrigerator Co.....	145	47,453	150,000
McCord & Bradfield Furniture Co.....	260	104,000	322,000
Oriel Cabinet Co.....	225	90,000	300,000
Sligh Furniture Co.....		no report	
Grand Rapids School Furniture Co.....	300	140,000	388,000
Kent Furniture Manufacturing Co.....	250	91,000	350,000
Wm. A. Berkey Furniture Co.....	130	60,500	150,000
Grand Rapids Furniture Co.....	110	32,791	70,000
New England Furniture Co.....	150	50,000	150,000
M. L. Sweet.....		no report	
Folding Chair and Table Co.....	60	30,102	80,000
Stowe and Davis Furniture Co.....		no report	
Worden Furniture Co.....	85	40,000	120,000
Grand Rapids Veneer Works.....	64	19,798	57,922
Universal Tripod Co.....		no report	
Peninsular Furniture Co.....	55	16,074	45,000
Grand Rapids Cabinet Co.....		no report	
Grand Rapids Parlor Furniture Co.....	50	16,000	75,000
Z. E. Allen.....	38	12,500	35,000
Wolverine Chair Co.....		no report	
Valley City Rattan Works.....	30	4,000	12,000
Valley City Table Co.....	31	10,400	25,000
Total.....	4,068	\$1,680,858	\$4,558,471

SYNOPSIS OF FIRMS IN GRAND RAPIDS.

WIDDICOMB FURNITURE CO.,

Manufacturers of bedroom furniture. Total wholesale value of goods manufactured during the past fiscal year, \$559,950; number of employes, 610; total amount of wages paid during the past fiscal year, \$298,765; number of employes canvassed by this bureau, 391. Nationality: Americans, 89; Hollanders, 155; Swedes, 59; Germans, 49; Polanders, 18; Scotchmen, 3; Russians, 6; Englishmen, 8; Canadians, 5; Frenchmen, 1; Danes, 4; Norwegians, 8; Austrians, 1. Parentage of those born in the United States: American, 44; Holland, 15; German, 20; English, 6; Irish, 2; Poland, 1; not answered, 1. One hundred and ninety-eight are married, 183 single and ten widowers. There are 568 children in the families, of which 188 attend school. One hundred and eighty-three employes support themselves only, while 208 support, other than themselves, 755 persons. Total number of months employed during the year, 4,054½; average 10.8+months. During the year 800 men lost time amounting to 10,046 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$148,749. Of the foreigners 62 are not naturalized; 70 had \$9,094.15 upon arrival in this country, and 12 have sent \$740 to relatives in the old country. Fifty-six employes paid \$410.10 for working tools during the year. Total annual family expenses, \$91,284. Seventy of the employes live at home and give their wages to their parents. Sixty-eight men saved \$8,518 during the year. Twenty-two have money at interest amounting to \$6,600. Ninety-three own homes valued at \$102,160. Of those owning houses 55 are mortgaged for \$26,575. One hundred and five rent and pay a monthly rental of \$622, an average of \$5.92. One hundred and forty-three families own sewing machines, 20 persons have organs, 6 pianos, 8 violins, 2 flutes, 1 a cornet, 1 an accordion, 1 a guitar and one a horn. Two hundred take newspapers and magazines, as follows: 77 dailies, 212 weeklies, and 30 magazines. One hundred and sixteen board and pay \$440.60 per week, an average of \$3.79. Forty-six carry a total life insurance of \$70,593. Sixty belong to benefit societies, representing a weekly sick benefit of \$298, an average of \$4.96. Three hundred and eighty-four had good health when they began work, 2 fair and 5 did not answer. Present state of health: 332 good, 12 poor, 46 fair and 1 did not answer. Nine cannot read and 12 cannot write. Thirty-four employes are subject to loss of wages by error, waste or breakage, 249 are not and 108 did not answer. Twenty-seven are required to exercise more than ordinary care to prevent accidents to themselves or others, 256 are not and 108 did not answer. Eighteen reported wages decreased during the past 5 years, 155 increased, 139 the same, 36 did not answer, 28 are boys under 16 years of age and 15 have been in this country less than one year. Three hundred and sixty-four pay cash when they purchase goods, 15 buy on credit and 12 did not answer. Ten keep an item-

ized account of their expenses, 368 do not, and 13 did not answer. Three hundred and eighteen are as well off as they were 5 years ago, 14 are not, 1 better, 15 did not answer, 28 are boys under 16 years of age, and 15 have been in this country less than one year.

PHENIX FURNITURE CO.,

Manufacturers of chamber suits, dining-room, hall and library furniture of the higher grade and style. Total wholesale value of goods manufactured during the past fiscal year, \$544,913; number of employes, 625; total amount of wages paid during the past fiscal year, \$230,389; number of employes canvassed by this bureau, 356. Nationality: Americans, 113; Hollanders, 153; Germans, 38; Englishmen, 11; Poles, 10; Canadians, 7; Austrians, 7; Scotchmen, 5; Danes, 3; Swedes, 3; Irishmen, 2; Frenchmen, 2; Norwegians, 1; Belgians, 1. Parentage of those born in the United States: American, 51; German, 26; Holland, 21; English, 6; Irish, 3; Canadian, 3; Scotch, 2; Austrian, 1. One hundred and eighty-eight are married, 158 single, and 10 widowers. There are 451 children in the families, of which 151 attend school. One hundred and fifty-nine employes support themselves only, while 197 support, other than themselves, 627 persons. Total number of months employed during the year, 3,802½; average, 10.6+. During the year 227 men lost time amounting to 9,835 days. All work 10 hours a day, are paid semi-monthly and in cash. Total annual earnings, \$164,384. Of the foreigners, 23 are not naturalized; 33 had \$2,766 upon arrival in this country, and 12 have sent \$601 to relatives in the old country. One hundred and nine paid \$722.45 for working tools during the year. Total annual family expenses, \$88,080. Seventy-three of the employes live at home and give their wages to their parents. Ninety-three men saved \$9,368 during the year. Thirty-six have money at interest, amounting to \$14,244. One hundred and four own homes, valued at \$138,405. Of those owning homes, 66 are mortgaged for \$30,635. Eighty-seven rent and pay a monthly rental of \$59.95, an average of \$6.43. One hundred and thirty-five families own sewing machines; 21 persons have organs, 9 pianos, 3 accordions, 2 horns, 1 a cornet, 1 a guitar, and 1 two drums and cymbals. One hundred and seventy-five take newspapers and magazines, as follows: 96 dailies, 183 weeklies, 1 semi-monthly, and 39 monthlies. Ninety-two board and pay \$358 per week, an average of \$3.89. Forty-nine carry a total life insurance of \$79,549. One hundred and sixty-seven belong to benefit societies, representing a weekly sick benefit of \$959, an average of \$5.74. Three hundred and fifty-three had good health when they began work, 2 poor, and 1 did not answer. Present state of health: 321 good, 25 poor, 9 fair, and 1 not answered. Twenty-one cannot read, and 22 cannot write. Only 1 man is reported subject to loss of wages by error, waste or breakage, 350 are not, and 5 did not answer. Fifty are required to exercise more than ordinary care to prevent accidents to themselves or others, 297 are not, and 9 did not answer. Fifty-three reported wages decreased during the past five years, 127 increased, 92 the same, 38 did not answer; 36 were boys under 16 years of age, and 10 have been in this country less than a year. Two hundred and fifty-four pay cash when they purchase goods, 3 cash and credit, 34 buy on credit, and 65 did not answer. Twenty-two keep an itemized account of their expenses, 270 do not, 64 did not answer. Two hundred and twenty-six are as well off as they were five years ago, 22 are not, 28 better, 34 did not answer, 36 are boys under 16 years of age, and 10 have been in this country less than one year.

NELSON, MATTER & CO.

No report was received from this firm. Number of employes canvassed by this bureau 810. Nationality: Americans, 108; Hollanders, 127; Germans, 21; Canadians, 21; Swedes, 10; Englishmen, 6; Scotchmen, 4; Irishmen, 3; Danes, 3; Polanders, 1; Austrians, 2; Norwegians, 2; Brazilians, 2. Parentage of those born in the United States: American, 45; German, 20; Holland, 18; Irish, 7; French, 3; Scotch, 2; Poland, 2; Canada, 2; Russia, 1; England, 8. One hundred and eighty-two are married, 118 single and 10 widowers. There are 528 children in the families, of which 192 attend school. One hundred and seven employes support themselves only, while 203 support, other than themselves, 682 persons. Total number of months employed during the year, 8,268½; average, 10.54 months. During the year 281 men lost time amounting to 10,454 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$147,448. Of the foreigners 27 are not naturalized; 39 had \$4,824 upon arrival in this country, and 21 have sent \$1,857 to relatives in the old country. One hundred employes paid \$868.05 for working tools during the year. Total annual family expenses, \$84,882. Thirty-six of the employes live at home and give their wages to their parents. Fifty-five men saved \$6,902 during the year. Twenty-seven have money at interest, amounting to \$12,375. One hundred and fifteen own homes valued at \$156,575. Of those owning homes 78 are mortgaged for \$36,089. Eighty rent and pay a monthly rental of \$566.30, an average of \$7.07. One hundred and fifty-one families own sewing machines; 18 persons have organs, 14 pianos, 2 accordions, 1 a zither, 1 a melodeon, 1 a harmonica, and 1 a violin. One hundred and ninety-one take newspapers and magazines, as follows: 121 dailies, 174 weeklies and 34 magazines. Eighty board and pay \$319 per week, an average of \$3.98. Forty-five carry a total life insurance of \$88,005. One hundred and twenty-seven belong to benefit societies, representing a weekly benefit of \$976, an average of \$7.68. Three hundred had good health when they began work, 5 air, 5 poor. Present state of health: 284 good, 19 fair, 7 poor. Twenty-seven cannot read and 35 cannot write. Twelve employes are subject to loss of wages by error, waste or breakage, and 298 are not. Fifty-five are required to exercise more than ordinary care to prevent accidents to themselves or others, and 255 are not. Fifty-four reported wages decreased during the past five years, 101 increased, 112 the same, 25 did not answer, 16 are boys under 16 years of age, and 2 have been in this country less than one year. One hundred and ninety-four pay cash when they purchase goods, 2 cash and credit, 89 buy on credit and 75 did not answer. Twenty-eight keep an itemized account of their expenses, 255 do not and 27 did not answer. One hundred and ninety-two are as well off as they were 5 years ago, 31 are not, 48 better, 21 did not answer.

 BERKEY & GAY FURNITURE CO.,

Manufacturers of fine furniture. Total wholesale value of goods manufactured during the past fiscal year, \$500,000. Number of employes, 375. Total amount of wages paid during the past fiscal year, \$200,000. Number employes canvassed by this bureau, 238. Nationality: Americans, 71; Hollanders, 71; Germans, 33; Swedes, 18; Canadians, 15; Englishmen, 6; Norwegians, 5; Austrians, 4; Danes, 4; Irishmen, 3; Scotchmen, 3; Polanders, 2; Frenchmen, 1; Belgians, 1; Welchmen, 1. Parentage of those born

in the United States: American, 22; German, 20; Holland, 17; Irish, 7; French, 1; Danish, 1; English, 1; Scotch, 1; Polish, 1. One hundred and thirty-six are married, 97 single and 5 widowers. There are 386 children in the families, of which 157 attend school. Eighty-nine employes support themselves only, while 149 support, other than themselves, 531 persons. Total number of months employed during the year, 2,558½; average, 10.7+. During the year 154 men lost time amounting to 5,886 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$121,171. Of the foreigners 21 are not naturalized; 81 had \$3,882 upon arrival in this country, and 15 have sent \$1,191 to relatives in the old country. Eighty-one employes paid \$540.50 for working tools during the year. Total annual family expenses, \$87,946. Twenty-four of the employes live at home and give their wages to their parents. Thirty-eight men saved \$4,949 during the year. Twenty-seven have money at interest or in the bank, amounting to \$5,080. Seventy-four own homes valued at \$77,725. Of those owning homes 47 are mortgaged for \$22,785. Sixty-four rent and pay a monthly rental of \$469.85, an average of \$7.94. One hundred and ten families own sewing machines; 15 persons have organs, 11 pianos, 1 a harmonica, 1 an accordion, 1 a banjo, 2 guitars, and 1 a banjo and accordin. One hundred and forty-five take newspapers and magazines, as follows: 81 dailies, 137 weeklies and 27 monthlies. Sixty-nine board and pay \$275.75 per week, an average of \$3.99. Thirty-five carry a total life insurance of \$62,700. One hundred and forty-two belong to benefit societies, representing a weekly sick benefit of \$843.13, an average of \$5.93. When they began work 236 had good health, 1 fair and 1 poor. Present state of health; 212 good, 24 fair and 2 poor. Twenty-five cannot read and thirty-one cannot write. Only 1 employe is subject to loss of wages by error, waste or breakage, 233 are not, 4 did not answer. Thirty-four are required to exercise more than ordinary care to prevent accidents to themselves or others, 196 are not, 8 did not answer. Thirty-seven reported wages decreased during the past five years, 99 increased, 69 the same, 11 did not answer, 15 are boys under 16 years of age and 7 have been in this country less than one year. One hundred and forty-two pay cash when they purchase goods, 30 buy on credit, 5 cash and credit, and 61 did not answer. Eighteen keep an itemized account of their expenses, 183 do not, and 87 did not answer. One hundred and fifty-four are as well off as they were five years ago, 26 are not, 29 are better off, 7 did not answer, 15 are boys under 16 years of age and 7 have been in this country less than one year.

BISSELL CARPET SWEEPER CO.,

Manufacturers of carpet sweepers. Total wholesale value of goods manufactured during the past fiscal year, \$350,000. Number of employes, 211. Total amount of wages paid during the past fiscal year, \$120,000. Number of employes canvassed by this bureau, 120 men and 25 girls. The canvass of the men resulted as follows: Nationality: Americans, 72; Hollanders, 28; Germans, 10; Canadians, 6; Norwegians, 2; Irishmen, 1; Englishmen, 1. Percentage of those born in the United States: American, 24; Holland, 15; German, 14; Irish, 7; Scotch, 4; English, 3; Austrian, 2; Canadian, 1; Norwegian, 1; French, 1. Thirty are married, 89 single, and 1 widower. There are 68 children in the families, of which 20 attend school. Eighty-seven employes support themselves only, while 33 support, other than themselves, 88 persons. Total number of months employed during the year, 1,281½; an average of 10 6+.

During the year 107 men lost time amounting to 2,655 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$43,965. Of the foreigners, 3 are not naturalized; 5 had \$885.50 upon arrival in this country. Two employes paid \$6 for working tools during the year. Total annual family expenses, \$15,186. Forty-nine of the employes live at home and give their wages to their parents. Nineteen men saved \$2,270 during the year. Eleven have money at interest amounting to \$2,322. Seventeen own homes valued at \$23,700. Of those owning homes, 9 are mortgaged for \$5,175. Fifteen rent and pay a monthly rental of \$117, an average of \$7.80. Twenty-two families own sewing machines; 2 persons have organs, 3 pianos, and 1 an accordion. Twenty-nine take newspapers and magazines, as follows: 17 dailies, 21 weeklies and 6 monthlies. Thirty-five board and pay \$128.25 per week, an average of \$3.66. Eighteen carry a total life insurance of \$16,315. Forty-seven belong to benefit societies, representing a weekly sick benefit of \$262.85, an average of \$5.59. One hundred and eighteen had good health when they began work, and 2 poor. Present state of health: 109 good, 8 fair, 2 poor, and 1 not answered. Five cannot read and 5 cannot write. None are subject to loss of wages by error, waste or breakage. Thirty-one are required to exercise more than ordinary care to prevent accidents to themselves or others, and 89 are not. Ten reported wages decreased during the past five years, 56 increased, 18 the same, 16 did not answer, 18 are boys under 16 years of age, and 2 have been in this country less than one year. Thirty-four pay cash when they purchase goods, 1 cash and credit, 2 buy on credit, and 88 did not answer. Six keep an itemized account of their expenses, 61 do not, and 53 did not answer. Seventy-three are as well off as they were five years ago, 4 are not, 14 better, 9 did not answer, 18 are boys under 16 years of age, and 2 have been in this country less than one year.

The canvass of the women resulted as follows: Nationality: Americans, 16; Germans, 3; Canadians, 3; English, 2; Polanders, 1. Parentage of those born in the United States: American, 10; German, 3; Scotch, 2; Holland, 1. One is married, 24 single. Twenty-four support themselves only. One employe has one person dependent upon her for support. Total number of months employed during the year, 243½, average 9.7½. During the year 19 lost time amounting to 622 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$6,546. Total annual family expenses, \$648. Eight live at home and give their wages to their parents. Six saved \$402 during the year. One has \$75 at interest. One pays \$12 per month rent. Five have sewing machines, 1 an organ, and 1 a piano. None take newspapers, and only one takes a magazine. Eight board and pay \$28.50 per week, an average of \$2.68. One carries a life insurance of \$150. Two belong to benefit societies, and in case of sickness receive a weekly benefit of \$3.50 each. Twenty-five had good health when they began work. Present state of health: 28 good, 1 fair, and 1 poor. Two are subject to loss of wages by error, waste or breakage, and 25 are not. Five are required to exercise more than ordinary care to prevent accident to themselves or others, 17 are not, and 3 did not answer. None reported wages decreased during the past five years, 5 increased, 10 the same, 8 not answered, and two are girls under 16 years of age. Three pay cash when they purchase goods, 22 did not answer. None keep an itemized account of their expenses. Seventeen are as well off as they were five years ago, 6 did not answer, and 2 are girls under 16 years of age.

GRAND RAPIDS CHAIR CO.,

Manufacturers of chairs, sideboards, chiffoniers, book-cases, house desks and tables. Total wholesale value of goods manufactured during the past fiscal year, \$274,686. Number of employes, 329. Total amount of wages paid during the past fiscal year, \$127,086. Number of employes canvassed by this bureau, 115 men and 21 girls. The canvass of the men resulted as follows : Nationality : Americans, 20 ; Hollanders, 40 ; Swedes, 14 ; Danes, 12 ; Germans, 12 ; Englishmen, 6 ; Austrians, 5 ; Canadians, 8 ; Norwegians, 2 ; Scotchmen, 1. Parentage of those born in the United States : American, 10 ; Holland, 3 ; Irish, 2 ; English, 2 ; German, 2 ; French, 1. Fifty-six are married, fifty-eight single and one widower. There are 188 children in the families, of which 52 attend school. Fifty-eight of the employes support themselves only, while 57 support, other than themselves, 194 persons. Total number of months employed during the year, 1,243 ; average, 10.8+. During the year 80 men lost time amounting to 2,766 days. All work 10 hours a day, are paid semi-monthly and in cash. Total annual earnings, \$51,713. Of the foreigners 18 are not naturalized ; 27 had \$2,637.50 upon arrival in this country, and 1 has sent \$50 to relatives in the old country. Thirty-seven employes paid \$190.50 for working tools during the year. Total annual family expenses, \$26,407. Seventeen of the employes live at home and give their wages to their parents. Twenty-one men saved \$1,654 during the year. Seven have money at interest amounting to \$1,900. Thirty own homes valued at \$23,465. Of those owning homes 21 are mortgaged for \$3,745. Twenty-seven rent and pay a monthly rental of \$175.33, an average of \$6.49. Thirty-seven families own sewing machines, and one person has an organ. Fifty-two take newspapers and magazines as follows : 24, dailies, 46, weeklies, and 5, magazines. Forty board and pay \$152.25 per week, an average of \$3.80. Eight carry a total life insurance of \$9,000. Fifty-six belong to benefit societies, representing a weekly sick benefit of \$330, an average of \$5.89. One hundred and fourteen had good health when they began work, and 1 poor. Present state of health : 103 good, 6 fair and 6 poor. Thirteen cannot read and 14 cannot write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accident to themselves or others. Fourteen reported wages decreased during the past 5 years, 43 increased, 42 the same, 6 did not answer, 8 are boys under 16 years of age and 8 have been in this country less than one year. Forty-nine pay cash when they purchase goods, 15 buy on credit, fifty-one did not answer. Twelve keep an itemized account of their expenses, 81 do not, 22 did not answer. Seventy-six are as well off as they were 5 years ago, 10 are not, 9 better, 9 did not answer, 3 are boys under 16 years of age and 8 have been in this country less than one year.

The canvass of the girls resulted as follows : Nativity : Americans, 8 ; Hollanders, 13. Parentage of those born in the United States : American, 4 ; Holland, 4. Single, 21. All support themselves only. Total number of months employed during the year, 2044, average 9.7+. During the year nineteen girls lost time amounting to 617 days. All live at home and give their wages to their parents. All work 10 hours a day, are paid semi-monthly and in cash. Total annual earnings, \$2,547. None have saved any money during the year, have nothing at interest, own no sewing machine or musical instrument, take no papers, etc. All have good health. Four cannot read and 5 cannot write. None are subject to loss of wages by error, etc. None are required to exercise more than ordinary care to prevent accident ; wages are the same, no increase or decrease.

GRAND RAPIDS REFRIGERATOR CO.,

Manufacturers of refrigerators. Total wholesale value of goods manufactured during the past fiscal year, \$150,000. Number of employees, 145. Total amount of wages paid during the past fiscal year, \$47,458. Number of employees canvassed by this bureau, 131. Nationality: Americans, 64; Hollanders, 48; Canadians, 7; Germans, 5; Polanders, 5; Englishmen, 1; Irishmen, 1. Parentage of those born in the United States: American, 34; Holland, 9; German, 6; English, 3; Polish, 3; Irish, 3; Canadian, 3; Scotch, 1; French, 1; New Zealand, 1. Forty-four are married, 85 single and 2 widowers. There are 88 children in the families, of which 38 attend school. Eighty-three of the employees support themselves only, while 48 support, other than themselves, 125 persons. Total number of months employed during the year, 1,362½; average 10.4+. During the year 87 men lost time amounting to 3,193 days. All work ten hours a day, are paid weekly and in cash. Total annual earnings, \$42,029. Of the foreigners 8 are not naturalized; 6 had \$540 upon arrival in this country, and one has sent \$34 to relatives in the old country. Twelve employees paid \$60 for working tools during the year. Total annual family expenses, \$17,765. Fifty of the employees live at home and give their wages to their parents. Thirteen men saved \$666 during the year. Seven have money at interest, amounting to \$2,825. Fifteen own homes valued at \$20,900. Of those owning homes 12 are mortgaged for \$6,980. Twenty-nine rent and pay a monthly rental of \$213.25, an average of \$7.35. Twenty-nine families own sewing machines; 8 persons have organs and 1 a piano. Thirty-one take newspapers and magazines, as follows: 20 dailies, 22 weeklies and 4 monthlies. Thirty-four board and pay \$119.75 per week, an average of \$3.52. Eleven carry a total life insurance of \$11,550. Thirty-four belong to benefit societies, representing a weekly sick benefit of \$180, an average of \$5.29. All had good health when they began work. Present state of health: 118 good, 6 poor, 6 fair and 1 not answered. Seven cannot read and eight cannot write. None of the employees are subject to loss of wages by error, waste or breakage. Thirty-seven are required to exercise more than ordinary care to prevent accidents to themselves or others, and 94 are not. Fifteen report a decrease of wages during the past 5 years, 36 an increase, 25 the same, 23 did not answer, 29 are boys under 16 years of age and 8 have been in this country less than one year. Forty-six pay cash when they purchase goods, 8 cash and credit, 7 buy on credit, and 75 did not answer. Thirteen keep an itemized account of their expenses, 54 do not, 84 did not answer. Fifty-three are as well off as they were 5 years ago, 15 are not, 6 better, 25 did not answer, 29 are boys under 16 years of age, and 8 have been in this country less than one year.

MCCORD & BRADFIELD FURNITURE CO.,

Manufacturers of medium priced chamber furniture. Total wholesale value of goods manufactured during the past fiscal year, \$323,000. Number of employees, 260. Total amount of wages paid during the past fiscal year, \$104,000. Number of employees canvassed by this bureau, 127. Nationality: Americans, 32; Hollanders, 75; Germans, 8; Canadians, 6; Englishmen, 2; Finlanders, 1; Belgians, 1; Irishmen, 1; Swiss, 1; not answered, 1. Parentage of those born in the United States: American, 22; Holland, 6; Canadian, 1; English, 1; German, 1; Irish, 1. Sixty-five are married, 59 single and 8 widowers.

There are 152 children in the families, of which 54 attend school. Fifty-three of the employes support themselves only, while 74 support, other than themselves, 228 persons. Total number of months employed during the year, 1,274, an average of 10.0+. During the year 101 men lost time amounting to 5,940 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$48,855. Of the foreigners 8 are not naturalized; 18 had \$719 upon arrival in this country, and four have sent back \$189. Twenty-five employes paid \$178 for working tools during the year. Total annual family expenses, \$25,054. Twenty-three live at home and give their wages to their parents. Twenty-four men saved \$1,384 during the year. Six have money at interest amounting to \$1,435. Thirty-one own homes valued at \$24,500. Of those owning homes 22 are mortgaged for \$8,270. Thirty-three rent and pay a monthly rental of \$195, an average of \$5.90. Thirty-nine families own sewing machines; 8 persons have organs, 2 pianos and 1 a banjo. Fifty-three take newspapers and magazines, as follows: 22 dailies, 47 weeklies, 8 monthlies. Thirty-five board and pay \$125.75 per week, an average of \$3.59. Twelve carry a total life insurance of \$11,464. Six belong to benefit societies and in case of sickness receive \$5 each per week. All had good health when they began work. Present state of health: 108 good, 18 fair, 1 poor. Ten cannot read or write. None are subject to loss of wages by error, waste or breakage. Ten are required to exercise more than ordinary care to prevent accident to themselves or others, 115 are not, 2 did not answer. Fourteen reported wages decreased during the past 5 years, 45 increased, 34 the same, 23 did not answer, 10 are boys under 16 years of age and 2 have been in this country less than one year. Eighty pay cash when they purchase goods, 1 cash and credit, 18 buy on credit, 83 did not answer. Ten keep an itemized account of their expenses, 89 do not, 28 did not answer. Eleven are not as well off as they were 5 years ago, 88 are as well off, 6 better, 15 did not answer, 10 are boys under 16 years of age and 2 have been in this country less than one year.

ORIEL CABINET CO.,

Manufacturers of fancy furniture, tables, desks, cabinets and book-cases. Total wholesale value of goods manufactured during the past fiscal year, \$300,000. Number of employes, 225. Total amount of wages paid during the past fiscal year, \$90,000. Number of employes canvassed by this bureau, 122. Nationality: Americans, 85; Hollanders, 35; Germans, 22; Irishmen, 12; Swedes, 6; Swiss, 3; Englishmen, 2; Canadians, 2; Russians, 1; Austrians, 2; Scotchmen, 1; West Indies, 1. Parentage of those born in the United States: American, 16; German, 9; Ireland, 6; Holland, 3; Sweden, 1. Sixty-eight are married, 52 single, and 2 widowers. There are 188 children in the families, of which 76 attend school. Fifty-one support themselves only, while 71 support, other than themselves, 242 persons. Total number of months employed during the year, 1,849, an average of 11.0+. During the year 94 men lost time amounting to 2,229 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$64,562. Of the foreigners, 12 are not naturalized, and 5 had \$340 upon arrival in this country. Thirty-seven employes paid \$210.50 for working tools during the year. Total annual family expenses, \$33,964. Nine of the employes live at home and give their wages to their parents. Forty-six men saved \$5,590 during the year. Eighteen have money at interest, amounting to \$6,830. Thirty-seven own homes valued at \$41,650. Of those owning homes, 28 are mortgaged for \$12,487. Twenty-

nine rent and pay a monthly rental of \$185.75, an average of \$6.40. Forty-eight families own sewing machines; 4 persons have pianos, 8 organs, and 1 a flute. Seventy take newspapers and magazines, as follows: 35 dailies, 67 weeklies, and 9 monthlies. Forty-one board and pay \$155.75 per week, an average of \$3.79. Twenty carry a total life insurance of \$37,500. Thirty-seven belong to benefit societies, representing a weekly sick benefit of \$304, an average of \$5.51. All had good health when they began work. Present state of health: 111 good, 9 fair, 2 poor. Two cannot read or write. Only one man is subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accident to themselves or others. Twenty report wages decreased during the past five years, 42 increased, 28 the same, 81 did not answer, and 1 is a boy under 16 years of age. One hundred pay cash when they purchase goods, 1 cash and credit, 9 buy on credit, and 12 did not answer. Twenty-three keep an itemized account of their expenses, 88 do not, and 11 did not answer. Forty-seven are as well off as they were five years ago, 9 are not, 40 better, 25 did not answer, and 1 is a boy under 16 years of age.

THE SLIGH FURNITURE CO.,

Manufacturers of chamber suits, sideboards and chiffoniers. This company refused to give amount of wages and value of goods manufactured. Total number of employees canvassed by this bureau, 116. Nationality: Americans, 41; Hollanders, 63; Canadians, 4; Germans, 4; Polanders, 2; Danes, 1; Russians, 1. Parentage of those born in the United States: American, 17; Holland, 18; Irish, 8; English, 1; French, 1; German, 1. Fifty-one are married, 63 single and two widowers. There are 123 children in the families, of which 41 attend school. Fifty-five support themselves only, while 61 support, other than themselves, 165 persons. Number of months employed during the year, 1,269 $\frac{1}{2}$, an average of 11.1 $\frac{1}{2}$. During the year 62 men lost time amounting to 1,881 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$46,669. Of the foreigners 14 are not naturalized; 12 had \$1,615 upon arrival in this country, and 5 have sent 482 to relatives in the old country. Twenty-one employees paid \$188 for working tools during the year. Total annual family expenses, \$28,542. Twenty-nine of the employees live at home and give their wages to their parents, and 1 gives his wages to the church society, who board and clothe him. Eight men saved \$490 during the year. Six have money at interest, amounting to \$1,268. Twenty-two own homes, valued at \$23,575. Of those owning homes 20 are mortgaged for \$9,425. Twenty-seven rent and pay a monthly rental of \$161, an average of \$5.96. Thirty-five families own sewing machines; 6 persons have organs, and 1 a piccolo. Fifty-six take newspapers and magazines, as follows: 24, dailies; 50 weeklies; 3, monthlies. Thirty board and pay \$109.38 per week, an average of \$3.64. Six carry a total life insurance of \$6,450. Six belong to benefit societies, representing a weekly sick benefit of \$35, an average of \$5.83. One hundred and twelve had good health when they began work, 2 fair and 2 poor. Present state of health: 104 good, 7 fair and 5 poor. Eleven cannot read and 16 cannot write. None of the employees are subject to loss of wages by error, waste or breakage. Twenty-five are required to exercise more than ordinary care to prevent accident to themselves or others, 89 are not and 2 did not answer. Eighteen reported wages decreased during the past 5 years, 88 increased, 35 the same, 5 did not

answer, and 20 are boys under 16 years of age. Seventy-two pay cash when they purchase goods, 2 cash and credit, 7 buy on credit and 85 did not answer. Five keep an itemized account of their expenses, 77 do not and 34 did not answer. Eighty-four are as well off as they were 5 years ago, 10 are not, 2 better, and 20 are boys under 16 years of age.

GRAND RAPIDS SCHOOL FURNITURE CO.,

Manufacturers of school desks, opera chairs, church furniture, and office desks. Total wholesale value of goods manufactured during the past fiscal year, \$386,000. Number of employes, 300. Total amount of wages paid during the past fiscal year, \$140,000. Number of employes canvassed by this bureau, 114. Nationality: Americans, 60; Hollanders, 17; Germans, 11; Canadians, 9; Englishmen, 4; Scotchmen, 8; Polanders, 2; Swedes, 2; Austrians, 2; Belgians, 1; Swiss, 1; Russians, 1; born on the ocean, 1. Parentage of those born in the United States: American, 48; Holland, 6; German, 4; Irish, 8; English, 2; Canadian, 1; Polish, 1. Sixty-nine are married, 41 single and 4 widowers. There are 156 children in the families, of which 62 attend school. Forty-one of the employes support themselves only, while 78 support, other than themselves, 221 persons. Total number of months employed during the year, 1,226½, an average of 10.7+. During the year 76 men lost time amounting to 3,084 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$55,743. Of the foreigners 8 are not naturalized; 16 had \$4,269 upon arrival in this county, and 4 have sent \$314 to relatives in the old country. Twenty-three employes paid \$191 for working tools during the year. Total annual family expenses, \$33,989. Thirteen live at home and give their wages to their parents. Fifteen men saved \$1,498 during the year. Eight have money at interest, amounting to \$2,785. Thirty own homes valued at \$33,500. Of those owning homes 24 are mortgaged for \$10,550. Forty-one rent and pay a monthly rental of \$284.75, an average of \$6.94. Forty-five families own sewing machines; 8 persons have organs, 1 piano, 1 a cornet and 1 an accordion. Fifty-five take newspapers and magazines, as follows; 33 dailies, 39 weeklies and 5 monthlies. Twenty-seven board and pay \$109.75 per week, an average of \$4.06. Fourteen carry a total life insurance of \$21,064. Sixty-four belong to benefit societies, representing a weekly sick benefit of \$408, an average of \$6.87. All had good health when they began work. Present state of health: 108 good, 6 fair, 4 poor and 1 did not answer. Seven cannot read, 8 cannot write. Only one is subject to loss of wages by error, waste or breakage. Thirty-four are required to exercise more than ordinary care in order to prevent accident to themselves or others and 80 are not. Twenty-two reported wages decreased during the past 5 years, 27 increased, 41 the same, 17 did not answer, 6 are boys under 16 years of age and one has been in this country less than 1 year. Seventy-one pay cash when they purchase goods, 16 buy on credit and 27 did not answer. Twenty-four keep an itemized account of their expenses, 69 do not and 21 did not answer. Seventy-five are as well off as they were 5 years ago, 18 are not, 7 better, 7 did not answer, 6 are boys under 16 years of age and one has been in this country less than one year.

KENT FURNITURE CO.,

Manufacturers of bedroom suits. Total wholesale value of goods manufactured during the past fiscal year, \$350,000. Number of employes, 250. Total amount of wages paid during the past fiscal year, \$91,000. Number of employes canvassed by this bureau, 96. Nationality: Americans, 25; Hollanders, 44; Germans, 18; Russians, 8; Canadians, 8; Irishmen, 1; Austrians, 1; Polanders, 1. Parentage of those born in the United States: American, 16; German, 8; English, 8; Holland, 2; Welsh, 1. Fifty-five are married, 40 single, 1 widower. There are 126 children in the families, of which 42 attend school. Sixty-two support themselves only, while 84 support other than themselves, 187 persons. Total number of months employed during the year, 1,078, an average of 11.1+. During the year 59 men lost time amounting to 1,661 days. All work 10 hours a day, are paid semi-monthly and in cash. Total annual earnings, \$38,724. Of the foreigners, 5 are not naturalized, 13 had \$2,756 upon arrival in this country, and 1 has sent \$600 to relatives in the old country. Nine employes paid \$45 for working tools during the year. Total annual family expenses, \$23,800. Fifteen of the employes live at home and give their wages to their parents. Twenty-six men saved \$1,949 during the year. Seven have money at interest, amounting to \$1,235. Twenty-six own homes valued at \$29,775. Of those owning homes, 19 are mortgaged for \$8,660. Thirty-four rent and pay a monthly rental of \$205.50, an average of \$6.04. Twenty-eight of the families own sewing machines; 5 persons have organs, 1 an organ and a violin, and 1 a melodeon. Forty-two take newspapers and magazines, as follows: 15 dailies and 36 weeklies. Twenty-one board and pay \$77.25 per week, an average of \$3.67. Four carry a total life insurance of \$5,700. Eleven belong to benefit societies, representing a weekly sick benefit of \$53, an average of \$4.81. All had good health when they began work. Present state of health: 91 good, 4 fair, and 1 poor. Three cannot read or write. None are subject to loss of wages by error, waste or breakage. Fourteen are required to exercise more than ordinary care to prevent accident to themselves or others. Twenty-one reported a decrease of wages during the past 5 years, 36 an increase, 18 the same, 11 did not answer, and 10 are boys under 16 years of age. Thirty-nine pay cash when they purchase goods, 21 buy on credit, 36 did not answer. Eighteen keep an itemized account of their expenses, 64 do not, 14 did not answer. Forty-eight are as well off as they were 5 years ago, 9 are not, 20 better, 9 did not answer, and 10 are boys under 16 years of age.

W. A. BERKEY FURNITURE CO.,

Manufacturers of artistic furniture. Total wholesale value of goods manufactured during the year, \$150,000. Number of employes, 130. Total amount of wages paid during the past fiscal year, \$60,500. Number canvassed by this bureau, 95. Nationality: Americans, 39; Hollanders, 30; Germans, 9; Canadians, 6; Danes, 3; English, 4; Russians, 1; Norwegians, 1; Polanders, 1; Scotchmen, 1. Parentage of those born in the United States: American, 28; Holland, 7; Irish, 4; German, 2; French, 1; Scotch, 1; Canadian, 1. Forty-eight are married, 45 single and 2 widowers. There are 108 children in the families, of which 45 attend school. Forty-five employes support themselves only, while 50 support, other than themselves, 150 persons. Total

number of months employed during the year, 958½, an average of 10.0+. During the year 78 men lost time amounting to 4,029 days. All work 10 hours a day, are paid semi-monthly and in cash. Total annual earnings, \$44,886. Of the foreigners 9 are not naturalized; 8 had \$1,010 upon arrival in this country and 3 have sent \$570 to relatives in the old country. Thirty employees paid \$188.85 for working tools during the year. Total annual family expenses, \$21,633. Fourteen of the employees live at home and give their wages to their parents. Fourteen men saved \$1,770 during the year. Eight have money at interest, amounting to \$1,525. Fourteen own homes valued at \$16,120. Of those owning homes 11 are mortgaged for \$4,575. Thirty rent and pay \$199.70 per month, an average of \$6.65. Thirty-six families own sewing machines; 5 persons have organs and 5 pianos. Fifty-one take newspapers and magazines, as follows: 43 dailies, 36 weeklies and 5 monthlies. Thirty-three board and pay \$132.50 per week, an average of \$4.01. Ten carry a total life insurance of \$17,326. Twenty-three belong to benefit societies, representing a weekly sick benefit of \$112.50, an average of \$4.39. Ninety-three had good health when they began work and 2 poor. Present state of health: 86 good, 1 fair and 8 poor. Four cannot read or write. None are subject to loss of wages by error, waste or breakage. Sixteen are required to exercise more than ordinary care to prevent accident to themselves or others. Sixteen reported wages decreased, 40 increased and 26 the same, 6 did not answer, 5 are boys under 16, 2 have been in this country less than one year. Sixty-two pay cash when they purchase goods, 7 buy on credit, and 26 not answered. Only 8 keep an itemized account of their expenses. Seventy-two are as well off as they were 5 years ago, 8 are not, 5 better, 3 did not answer, 5 are boys under 16 years of age and 2 have been in this country less than one year.

GRAND RAPIDS FURNITURE CO.,

Manufacturers of common bedsteads. Total wholesale value of goods manufactured during the past fiscal year, \$70,000. Number of employees, 110. Total amount paid for wages during the past fiscal year, \$32,791. Number of employees canvassed by this bureau, 81. Nationality: Americans 28; Hollanders, 31; Germans, 10; Canadians, 5; Polanders, 3; Englishmen, 2; Irishmen, 1; Bermuda Islander, 1. Parentage of those born in the United States: American, 15; Holland, 6; German, 2; Scotch, 2; Canadian, 1; Dane, 1; Irish, 1. Thirty-five are married, 43 single, 3 widowers. There are 98 children in the families of which 21 attend school. Forty-two of the employees support themselves only, while 39 support, other than themselves, 121 persons. Total number of months employed during the year, 817, an average of 10.0+. During the year 34 men lost time amounting to 1,409 days. All work 10 hours, are paid weekly in cash. Total annual earnings, \$25,164. Of the foreigners 7 are not naturalized; 6 had \$725 upon arrival in this country. Nine men paid \$38.25 for working tools during the year. Total annual family expenses, \$14,084. Twenty-five of the employees live at home and give their wages to their parents. Ten men saved \$885 during the year. Two have money at interest amounting to \$1,625. Fourteen own homes valued at \$14,120. Of those owning homes ten are mortgaged for \$4,225. Twenty-three rent and pay a monthly rental of \$129, an average of \$5.60. Fourteen families own sewing machines, and 5 persons have organs. Twenty-one take newspapers and magazines, as follows: 6 dailies, 22 weeklies, and 1 monthly. Seventeen board and pay \$55.50 per week, an average of

\$8.26. Eight carry a total life insurance of \$6,785. Seven belong to benefit societies, representing a weekly sick benefit of \$28, an average of \$3.28. Seventy-nine had good health when they began work and 2 poor. Present state of health: 64 good, 11 fair and 6 poor. Six cannot read and 7 cannot write. None are subject to loss of wages by error, waste or breakage. Twenty-one are required to exercise more than ordinary care to prevent accident to themselves or others. Twenty-one reported a decrease of wages during the past 5 years, 10 an increase, 18 the same, 10 did not answer, 20 are boys under 16 years of age and 2 have been in this country less than one year. Thirty-six pay cash when they purchase goods, 6 cash and credit, 8 buy on credit, 81 did not answer. Only 5 keep an itemized account of their expenses. Thirty-two are as well off as they were 5 years ago, 17 are not, 4 better, 6 did not answer, 20 are boys under 16 years of age and 2 have been in this country less than one year.

NEW ENGLAND FURNITURE CO.,

Manufacturers of chamber suits. Total wholesale value of goods manufactured during the past fiscal year, \$150,000. Number of employes, 150. Total amount of wages paid during the past fiscal year, \$50,000. Number of employes canvassed by this bureau, 72. Nationality: Americans, 29; Hollanders, 31; Germans, 10; Canadians, 2. Parentage of those born in the United States: American, 19; Holland, 5; German, 2; English, 2; Scotch, 1. Thirty-five are married, 36 single, 1 widower. There are 62 children in the families, of which 14 attend school. Thirty-five of the employes support themselves only, while 37 support, other than themselves, 98 persons. Total number of months employed during the year, 762%, an average of 10.5+. During the year 65 men lost time amounting to 2,308 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$27,002. Of the foreigners 8 are not naturalized; 2 had \$210 upon arrival in this country and 1 sent \$10 to relatives in the old country. Six employes paid \$58.50 for working tools during the year. Total annual family expenses, \$14,810. Fourteen of the employes live at home and give their wages to their parents. Seventeen men saved \$1,318 during the year. Ten have money at interest, amounting to \$974. Twelve own homes, valued at \$10,800. Of those owning homes 11 are mortgaged for \$5,725. 21 rent and pay a monthly rental of \$128.50, an average of \$6.11. Twenty-five families own sewing machines, 2 persons have organs, 8 pianos, 1 a cornet, 2 violins, 1 a harmonica. Thirty-eight take newspapers and magazines, as follows: 28 dailies, 27 weeklies, 6 monthlies. Twenty board and pay \$67.50 per week, an average of \$3.37. Two carry a total life insurance of \$2,200. Five belong to benefit societies, representing a weekly sick benefit of \$25, an average of \$5. Seventy-one had good health when they began work, and one did not answer. Present state of health: 67 good, 4 fair, 1 did not answer. One cannot read or write. Two are subject to loss of wages by error, waste or breakage. Six are required to exercise more than ordinary care to prevent accident to themselves or others. Fifteen reported wages decreased during the past five years, 22 increased, 9 the same, 18 did not answer, 7 are boys under 16 years of age and 1 has been in this country less than one year. Fifty-three pay cash when they purchase goods, 2 cash and credit, 1 credit, and 16 did not answer. Only 8 keep an itemized account of their expenses. Twenty-six are as well off as they were 5 years ago, 8 are not, 18 better, 17 did not answer, 7 are boys under 16 years of age and 1 has been in this country less than one year.

M. L. SWEET,

Manufacturer of medium folding beds, bedsteads and suits. This firm refused to give the total value of goods manufactured and total amount of wages paid. Number of employes canvassed by this bureau, 56. Nationality: Americans, 25; Hollanders, 27; Canadians, 3; Norwegians, 1. Parentage of those born in the United States: American, 12; Holland, 8; Irish, 3; Canadian, 1; French, 1. Twenty-one are married, 34 single, 1 a widower. There are 60 children in the families, of which 25 attend school. Thirty-two employes support themselves only, while 24 support, other than themselves, 74 persons. Total number of months employed during the year, 584½, an average of 9 5+. During the year 24 men lost time amounting to 1,143 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$16,454. Of the foreigners 8 are not naturalized; 2 had \$110 upon arrival in this country. Six employes paid \$52 for working tools during the year. Total annual family expenses, \$9,202. Nineteen live at home and give their wages to their parents. Seven men saved \$572 during the year. Four have money at interest, amounting to \$430. Fourteen own homes valued at \$17,000. Of those owning homes 7 are mortgaged for \$2,475. Eight rent and pay a monthly rental of \$56.50, an average of \$7.06. Twelve families own sewing machines, and 3 persons have organs. Twenty take newspapers and magazines, as follows: 10 dailies, 16 weeklies and 2 monthlies. Fifteen board and pay \$48.75 per week, an average of \$3.25. Five carry a total life insurance of \$5,780. Eight belong to benefit societies, representing a weekly sick benefit of \$45, an average of \$5.62. All had good health when they began work. Present state of health: 48 good, 4 fair, 4 poor. Four cannot read or write. Only 1 man is subject to loss of wages by error, waste or breakage. Twenty-six are required to exercise more than ordinary care to prevent accident to themselves or others. Twelve report a decrease of wages during the past 5 years, 10 an increase, 9 the same, 14 are boys under 16 years of age, and 6 have been in this country less than one year, and 5 did not answer. Twelve pay cash when they purchase goods, 1 cash and credit, 3 buy on credit, 40 did not answer. Only 4 keep an itemized account of their expenses. Twenty-five are as well off as they were 5 years ago, 5 are not, 3 better, 3 did not answer, 14 are boys under 16 years of age, and 6 have been in this country less than one year.

FOLDING CHAIR AND TABLE CO.,

Manufacturers of all kinds of tables. Total wholesale value of goods manufactured during the past fiscal year, \$80,000. Number of employes, 60. Total amount of wages paid during the past fiscal year, \$30,102. Number of employes canvassed by this bureau, 49. Nationality: Americans, 29; Hollanders, 10; Irishmen, 2; Englishmen, 2; Germans, 1; Canadians, 2; Swedes, 8. Parentage of those born in the United States: American, 19; Holland, 6; Irish, 2; English, 1; German, 1. Twenty-five are married, 22 single, 2 widowers. There are 51 children in the families, of which 18 attend school. Twenty of the employes support themselves only, while 29 support, other than themselves, 69 persons. Total number of months employed during the year, 521½, an average of 10.6+. During the year 37 men lost time amounting to 1,477 days. All work 10 hours, are paid weekly in cash. Total annual earnings, \$22,129. Of the

foreigners, 4 are not naturalized; 3 had \$196 upon arrival in this country, and one has sent \$47 to relatives in the old country. Six employees paid \$36.40 for working tools during the year. Total annual family expenses, \$11,692. Five live at home and give their wages to their parents. Eight men saved \$1,240 during the year. Four have money at interest, amounting to \$880. Thirteen own homes, valued at \$25,100. Of those owning homes, 8 are mortgaged for \$5,800. Twelve rent and pay a monthly rental of \$87.70, an average of \$7.80. Nineteen of the families own sewing machines; 5 persons have organs and 2 pianos. Thirty-two take newspapers and magazines, as follows: 23 dailies, 24 weeklies, 2 monthlies. Sixteen board and pay \$61.75 per week, an average of \$3.86. Seven carry a total life insurance of \$7,385. Three belong to benefit societies, representing a weekly sick benefit of \$15 per week, an average of \$5. All had good health when they began work. Present state of health: 37 good, 10 fair, and 2 poor. Two cannot write. None of the employees are subject to loss of wages by error, waste or breakage. Sixteen are required to exercise more than ordinary care to prevent accidents to themselves or others. Twelve report wages decreased during the past five years, 15 increased, 16 the same, 1 did not answer, 3 are boys under 16 years of age, and 2 have been in this country less than one year. Thirty-two pay cash when they purchase goods, 4 buy on credit, and 18 did not answer. Only 4 keep an itemized account of their expenses. Thirty-one are as well off as they were five years ago, 8 are not, 4 better, 3 are boys under 16 years of age, and 2 have been in this country less than one year.

STOWE & DAVIS FURNITURE CO.,

Manufacturers of dining tables. Number of employees canvassed by this bureau, 44. Nationality: Americans, 12; Hollanders, 28; Germans, 5; Canadians, 3; Irishmen, 1. Parentage of those born in the United States: American, 6; Holland, 2; German, 2; Irish, 1; English, 1. Eighteen are married, 26 single. There are 39 children in the families, of which 12 attend school. Twenty-four support themselves only, while 20 support, other than themselves, 59 persons. Total number of months employed during the year, 493½, an average of 11.2½. Twenty-eight men lost time during the year amounting to 471 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$18,333. Of the foreigners 3 are not naturalized; 4 had \$156 upon arrival in this country, and 1 has sent \$25 to relatives in the old country. Six employees paid \$35 for working tools during the year. Total annual family expenses, \$8,580. Eleven of the employees live at home and give their wages to their parents. Fourteen men saved \$1,758 during the year. Three have money at interest, amounting to \$400. Eight own homes valued at \$7,800. Of those owning homes 6 are mortgaged for \$1,975. Twelve rent and pay a monthly rental of \$82.50, an average of \$6.87. Eleven families own sewing machines, and one person has a piano. Fifteen take newspapers and magazines, as follows: 8 dailies, 18 weeklies and 3 monthlies. Fourteen board and pay \$49 per week, an average of \$3.50. Two carry a total life insurance of \$3,500. Three belong to benefit societies, representing a weekly sick benefit of \$20 per week, an average of \$6.66. All had good health when they began work. Present state of health: 43 good, 1 fair and 1 did not answer. Four cannot read or write. None are subject to loss of wages by error, waste or breakage. Eighteen are required to exercise more than ordinary care to prevent accident to themselves or others. Only one reports

a decrease of wages during the past five years, 18 an increase, 12 the same, 3 did not answer, 5 are boys under 16 years of age and 5 have been in this country less than one year. Twenty-six pay cash when they purchase goods, 2 cash and credit, 2 buy on credit and 14 did not answer. Only 4 keep an itemized account of their expenses. Twenty-six are as well off as they were 5 years ago, 1 is not, 2 better, 5 did not answer, 5 are boys under 16 years of age and 5 have been in this country less than one year.

WORDEN FURNITURE CO.,

Manufacturers of chamber furniture. Total wholesale value of goods manufactured during the past fiscal year, \$120 000. Number of employes, 85. Total amount paid for wages during the past fiscal year, \$40,000. Number of employes canvassed by this bureau, 42. Nationality: Americans, 20; Hollanders, 20; Germans, 2. Parentage of those born in the United States: American, 9; Holland, 10; German, 1. Sixteen are married, 22 single and 4 widowers. There are 39 children in the families, of which 8 attend school. Twenty-one of the employes support themselves only, while 21 support, other than themselves, 51 persons. Total number of months employed during the year, 453, an average of 10.7+. During the year 31 men lost time amounting to 803 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$15,805. Of the foreigners 1 is not naturalized, 2 had \$1,050 upon arrival in this country. Eight employes paid \$26 for working tools during the year. Total annual family expenses, \$7,819. Nine of the employes live at home and give their wages to their parents. Thirteen men saved \$983 during the year. Nine have money at interest, amounting to \$915. Ten own homes valued at \$12,600. Of those owning homes 8 are mortgaged for \$5,205. Seven rent and pay a monthly rental of \$37.50, an average of \$5.35. Thirteen families own sewing machines; 3 persons have organs and 1 a piano. Thirteen take newspapers and magazines, as follows: 5 dailies, 12 weeklies, 1 magazine. Twelve board and pay \$46.46 per week, an average of \$3.87. Only one man carries a life insurance, amounting to \$1,000. Nine belong to benefit societies, representing a weekly sick benefit of \$45, an average of \$5. All had good health when they began work. Present state of health: 40 good and 2 fair. Two cannot read or write. None are subject to loss of wages by error, waste or breakage. Two only are required to exercise more than ordinary care to prevent accident to themselves or others. Seven reported wages decreased during the past 5 years, 15 increased, 6 the same, 7 did not answer, 7 are boys under 16 years of age. Twenty-four pay cash when they purchase goods, 1 cash and credit, 3 buy on credit, 14 did not answer. Five keep an itemized account of their expenses. Twelve are as well off as they were 5 years ago, 3 are not, 16 better, 4 did not answer, and 7 are boys under 16 years of age.

GRAND RAPIDS VENEER WORKS,

Manufacturers of veneers, panels and dimension lumber. Total wholesale value of goods manufactured during the past fiscal year, \$57,922. Number of employes, 64. Total amount of wages paid during the past fiscal year, \$19,798. Number of employes canvassed by this bureau, 42. Nationality: Americans, 31; Russians, 4; Canadians, 3;

Hollanders, 8; Isle of Man, 1. Parentage of those born in the United States: American, 18; Irish, 8; German, 7; Canadian, 1; French, 1; Belgian, 1. Eighteen are married, 22 single, 2 widowers. There are 86 children in the families, of which 10 attend school. Twenty-one of the employees support themselves only, while 21 support other than themselves, 55 persons. Total number of months employed during the year, 472, an average of 11.2+. During the year 22 men lost time amounting to 882 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$18,203. Of the foreigners 2 are not naturalized, and 4 had \$780 upon arrival in this country. Total annual family expenses, \$6,937. Three of the employees live at home and give their wages to their parents. Thirteen men saved \$1,670 during the year. Seven have money at interest amounting to \$1,950. Two own their own homes, valued at \$3,100. Both are mortgaged for a total of \$416. Fourteen rent and pay a monthly rental of \$104.50, an average of \$7.46. Ten families own sewing machines and 8 persons have organs. Sixteen take newspapers as follows: 17, dailies, and 8 weeklies. Twenty-two board and pay \$82.50 per week, an average of \$3.75. Two carry a total life insurance of \$350. Three belong to benefit societies and receive \$5 each in case of sickness. Forty had good health when they began work and 2 poor. Present state of health: 88 good, 1 fair and 3 poor. Three cannot read or write. None are subject to loss of wages by error, waste or breakage. Twenty-three are required to exercise more than ordinary care to prevent accident to themselves or others. Ten reported wages decreased during the past five years, 9 increased, 6 the same, 16 did not answer, 1 is a boy under 16 years of age. Twenty-four pay cash when they purchase goods, 2 cash and credit, 2 buy on credit and 14 did not answer. Six keep an itemized account of their expenses. Twenty-four are as well off as they were 5 years ago, 8 are not, 2 are better, 7 did not answer, and 1 is a boy under 16 years of age.

UNIVERSAL TRIPOD CO.,

Manufacturers of furniture novelties. Number of employees canvassed by this bureau, 39. Nationality: Americans, 7; Hollanders, 25; Germans, 8; Canadians, 2; Irishmen, 1; Central Americans, 1. Parentage of those born in the United States: American, 2; Hollander, 8; English, 1; Canadian, 1. Nineteen are married and 20 single. There are 82 children in the families, of which 12 attend school. Twenty support themselves only, while 19 support other than themselves, 58 persons. Total number of months employed during the year, 894, an average of 10.1+. During the year 31 men lost time amounting to 1,584 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$15,908. Of the foreigners, 4 are not naturalized; 8 had \$491 upon arrival in this country. Three employees paid \$26 for working tools during the year. Total annual family expenses, \$8,644. Eleven employees live at home and give their wages to their parents. Four men saved \$400 during the year. Two men have money at interest, amounting to \$160. Eleven own homes valued at \$12,800. Of those owning homes, 8 are mortgaged for \$3,725. Eight rent and pay a monthly rental of \$58.75, averaging \$3.72. Fourteen families own sewing machines; 2 persons have organs and 1 a piano. Fourteen take newspapers, as follows: 5 dailies and 13 weeklies. Nine board and pay \$31.50 per week, an average of \$3.50. Four carry a total life insurance of \$6,850. Only one belongs to a benefit society, and receives \$10 a week in case of sickness. Thirty-eight had good health when they began work and 1 poor. Present

state of health: 32 good, 1 fair, and 6 poor. One cannot read and 2 cannot write. None are subject to loss of wages by error, waste or breakage. Four are required to exercise more than ordinary care to prevent accident to themselves or others. Six reported a decrease of wages during the past five years, 12 an increase, 12 the same, 4 did not answer, 8 are boys under 16 years of age, and 2 have been in this country less than one year. Twenty-one pay cash when they purchase goods, 1 cash and credit, 6 buy on credit, and 11 did not answer. Four keep an itemized account of their expenses. Nineteen are as well off as they were five years ago, 8 are not, 5 better, 2 did not answer, 8 are boys under 16 years of age, and 2 have been in this country less than one year.

PENINSULAR FURNITURE CO.,

Manufacturers of medium priced beds and chamber furniture. Total wholesale value of goods manufactured during the past fiscal year, \$45,000. Number of employes, 55. Total amount of wages paid during the past fiscal year, \$16,074. Number of employes canvassed by this bureau, 39. Nationality: Americans, 11; Hollanders, 24; Germans, 2; Canadians, 1; born on the ocean, 1. Parentage of those born in the United States: American, 6; Holland, 2; German, 1; French, 1; English 1. Thirteen are married and 26 single. There are 21 children in the families, of which 8 attend school. Twenty-five of the employes support themselves only, while 14 supported, other than themselves, 35 persons. Total number of months employed during the year, 327½, an average of 8.3+. During the year 26 men lost time amounting to 1,756 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$11,829. One foreigner had \$50 upon arrival in this country. Three employes paid \$44.75 for working tools during the year. Total annual family expenses, \$5,218. Fifteen of the employes live at home and give their wages to their parents. Seven men saved \$875 during the year. Two men have money at interest, amounting to \$250. Six own homes, valued at \$7,800. Of those owning homes 5 are mortgaged for \$2,470. Seven rent and pay a monthly rental of \$46, an average of \$6.57. Eight families own sewing machines, and 2 persons have organs. Nine take newspapers and magazines, as follows: 2 dailies, 11 weeklies and one monthly. Ten board and pay \$34.50 per week, an average of \$3.45. Two carry a total life insurance of \$2,000. Three belong to benefit societies, representing a weekly sick benefit of \$16, an average of \$5.33. All had good health when they began work. Present state of health: 37 good, 1 fair and 1 poor. One cannot read or write. None are subject to loss of wages by error, waste or breakage. Fourteen are required to exercise more than ordinary care to prevent accidents to themselves or others. Five reported a decrease of wages during the past 5 years, 14 an increase, 9 the same, 2 did not answer, 8 are boys under 16 years of age and 1 has been in this country less than one year. Twelve pay cash when they purchase goods, 4 buy on credit and 23 did not answer. Only one keeps an itemized account of his expenses. Twenty-one are as well off as they were 5 years ago, 7 are not, 2 are better, 8 are boys under 16 years of age and 1 has been in this country less than one year.

GRAND RAPIDS CABINET CO.

All information refused by this company. Number of employes canvassed by this bureau, 85. Nationality : Americans, 14 ; Hollanders, 9 ; Canadians, 5 ; Germans, 3 ; Swedes, 2 ; Irishmen, 1 ; Danes, 1. Parentage of those born in the United States : American, 9 ; Holland, 8 ; German, 1 ; French, 1. Twenty-one are married, and 14 single. There are 81 children in the families, of which 8 attend school. Fourteen support themselves only, while 21 support, other than themselves, 50 persons. Total number of months employed during the year, 378½, an average of 10.8+. During the year 22 men lost time amounting to 1,078 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$15,824. Of the foreigners 4 are not naturalized ; 5 had \$243 upon arrival in this country. Nine paid \$125 for working tools during the year. Total annual family expenses, \$9,207. One employe lives at home and gives his wages to his parents. Five employes saved \$1,241 during the year. Four have money at interest amounting to \$1,890. Four own homes valued at \$4,700. Of those owning homes 8 are mortgaged for \$1,200. Thirteen rent and pay a monthly rental of \$108.50, an average of \$7.96. Eleven families own sewing machines, 1 person has an organ, 1 a piano, 1 a clarinet and 1 a violin. Eleven take newspapers, as follows : 8 dailies and 4 weeklies. Fourteen board and pay \$47.75 per week, an average of \$3.41. Six carry a total life insurance of \$10,500. Five belong to benefit societies and receive \$5 each in case of sickness. All had good health when they began work. Present state of health : 33 good and 2 fair. One cannot read or write. None are subject to loss of wages by error, waste or breakage. Four are required to exercise more than ordinary care to prevent accident to themselves or others. Six reported wages decreased during the past 5 years, 18 increased, 6 the same, 3 did not answer and 2 are boys under 16 years of age. Twenty-four pay cash when they purchase goods, 2 cash and credit, 3 buy on credit, 6 did not answer. Six keep an itemized account of their expenses. Twenty-four are as well off as they were 5 years ago, 4 are not, 4 better, 1 did not answer and 2 are boys under 16 years of age.

GRAND RAPIDS PARLOR FURNITURE CO.,

Manufacturers of parlor furniture. Total wholesale value of goods manufactured during the past fiscal year, \$75,000. Number of employes, 50. Total amount of wages paid during the past fiscal year, \$16,000. Number of employes canvassed by this bureau, 34. Nationality : Americans, 25 ; Germans, 3 ; Hollanders, 2 ; Canadians, 2 ; Swedes, 1 ; Norwegians, 1. Parentage of those born in the United States : American, 14 ; Irish, 4 ; German, 5 ; Scotch, 1 ; English, 1. Fifteen are married and 19 single. There are 20 children in the families, of which 6 attend school. Eighteen of the employes support themselves only, while 16 support, other than themselves, 34 persons. Total number of months employed during the year, 360½, an average of 10.6+. During the year twenty-one men lost time amounting to 715 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$16,561. Of the foreigners 2 are not naturalized ; 1 had \$16 on arrival in this country. Thirteen employes paid \$30 for working tools during the year. Total family expenses, \$8,054. Five employes live at home and give their wages to their parents. Seven men saved \$1,075 during the year. Two have

money at interest, amounting to \$170. Five own their own homes valued at \$11,800. Of those owning homes 4 are mortgaged for \$2,700. Nine rent and pay a monthly rental of \$77, an average of \$8.55. Nine own sewing machines; 3 persons have organs, 2 pianos, 1 a melodeon. Eighteen take newspapers and magazines, as follows: 16 dailies, 15 weeklies, and 6 monthlies. Thirteen board and pay \$51 per week, an average of \$3.92. Five carry a total life insurance of \$10,000. Four belong to benefit societies, representing a weekly sick benefit of \$40 per week, an average of \$10. All had good health when they began work. Present state of health: 26 good, 4 fair and 4 poor. All can read and write. None are subject to loss of wages by error, waste or breakage. Two are required to exercise more than ordinary care to prevent accident to themselves or others. Thirteen reported wages decreased during the past 5 years, 8 increased, 4 the same, 6 did not answer, 8 are boys under 16 years of age. Twenty-four pay cash when they purchase goods, 1 cash and credit, 2 buy on credit, 7 did not answer. Two keep an itemized account of their expenses. Twenty are as well off as they were 5 years ago, 5 are not, 2 better, 4 did not answer, 3 are boys under 16 years of age.

Z. E. ALLEN,

Manufacturer of chamber suits. Total wholesale value of goods manufactured during the year, \$35,000. Number of men employed, 38. Total amount of wages paid during the past fiscal year, \$12,500. Number of men canvassed by this bureau, 27. Nationality: Americans, 12; Hollanders, 11; Germans, 8; Danes, 1. Parentage of those born in the United States: American, 4; Holland, 3; Irish, 2; English, 2; German, 1. Eight are married, 18 single, and 1 a widower. There are 22 children in the families, of which 7 attend school. Nineteen employees support themselves only, while 8 support, other than themselves, 28 persons. Total number of months employed during the year, 309½, an average of 11.4+. During the year 15 men lost time amounting to 298 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$10,287. One of the foreigners is not naturalized; 3 had \$485 upon arrival in this country. Three employees paid \$18 for working tools during the year. Total annual family expenses, \$8,181. Nine employees live at home and give their wages to their parents. Ten employees saved \$1,060 during the year. Four have \$845 at interest. Two own homes valued at \$1,550. Of those owning homes 1 is mortgaged for \$450. Six rent and pay a monthly rental of \$42.50, an average of \$7.08. Seven families own sewing machines; 1 person has an organ and 1 a piano. Eight take newspapers and magazines, as follows: 4 dailies, 11 weeklies, and 3 monthlies. Nine board and pay \$38 per week, an average of \$3.66. Two carry a total life insurance of \$8,000. Two belong to benefit societies, representing a weekly sick benefit of \$16.50, an average of \$8.25. All had good health when they began work, and all have good health at the present time. All can read and write. Only 1 is subject to loss of wages by error, waste or breakage. Eleven are required to exercise more than ordinary care to prevent accident to themselves or others. Three reported wages decreased during the past five years, 11 increased, 4 the same, 2 did not answer, 6 are boys under 16 years of age, and 1 has been in this country less than one year. Twenty-one pay cash when they purchase goods, and 6 did not answer. Five keep an account of their expenses. Sixteen are as well off as they were five years ago, 3 better, 1 did not answer, 6 are boys under 16 years of age, and 1 has been in this country less than one year.

WOLVERINE CHAIR CO.,

No report was received from this company. Number of employes canvassed by this bureau, 19. Nationality: Americans, 6; Irishmen, 3; Hollanders, 5; Germans, 2; Canadians, 1; Scotch, 1; Swede, 1. Parentage of those born in the United States: American, 8; German, 2; French, 1. Ten are married, 8 single and 1 a widower. There are 25 children in the families, of which 9 attend school. Eight of the employes support themselves only, while 11 support, other than themselves, 38 persons. Total number of months employed during the year, 196½, an average of 10.3+. During the year 16 men lost time amounting to 818 days. All work ten hours, are paid weekly and in cash. Total annual earnings, \$9,271. Of the foreigners 5 are not naturalized; 3 had \$254 upon arrival in this country, and 1 has sent \$120 to relatives in the old country. Eight of the employes paid \$108 for working tools during the year. Total annual family expenses, \$5,501. Three of the employes live at home and give their wages to their parents. One man saved \$150 during the year. None have money at interest. Four own homes valued at \$3,900. Of those owning homes 3 are mortgaged for \$1,750. Six rent and pay a monthly rental of \$66, an average of \$11. Nine families own sewing machines, 1 person has an organ and 1 has a piano. Ten take newspapers and magazines, as follows: 8 dailies, 3 weeklies and 1 magazine. Five board and pay \$18.75 per week, an average of \$3.75. Four carry a total life insurance of \$7,150. One belongs to a benefit society and would receive \$4 a week in case of sickness. Eighteen had good health when they began work and 1 poor. Present state of health: 14 good, 4 fair and 1 poor. Two cannot read or write. None are subject to loss of wages by error, waste or breakage. Seven are required to exercise more than ordinary care to prevent accident to themselves or others. Seven reported wages decreased during the past 5 years, 6 increased, 5 the same, 1 did not answer. Twelve pay cash when they purchase goods, 2 buy on credit and 5 did not answer. Five keep an itemized account of their expenses. Fifteen are as well off as they were 5 years ago, and 4 are not.

VALLEY CITY RATTAN WORKS,

Manufacturers of rattan chairs. Total wholesale value of goods manufactured during the past fiscal year, \$12,000. Number of employes, 80. Total amount of wages paid during the past fiscal year, \$4,000. Number of employes canvassed by this bureau, 13, of which 7 are men and 6 women. The canvass of the men resulted as follows: Nationality: Americans, 2; Germans, 3; Hollanders, 1; Canadians, 1. Parentage of those born in the United States: American, 1; Spanish, 1. Three are married, 3 single and 1 a widower. There are 18 children in the families, of which 4 attend school. Four employes support themselves only, while 3 support, other than themselves, 17 persons. Total number of months employed during the year, 82, an average of 11.7+. During the year 2 men lost time amounting to 53 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$3,565. Of the foreigners 2 are not naturalized; 1 had \$20 upon arrival in this country and 1 has sent \$60 to relatives in the old country. Annual family expenses, \$1,833. One lives at home and gives his wages to his parents. Three men saved \$355 during the year. One man has \$200 at interest.

None own their own homes. Three rent and pay a monthly rental of \$18, an average of \$6. One family owns a sewing machine; none own musical instruments. Three take newspapers: 2 dailies and 1 weekly. Three board and pay \$10 per week, an average of \$3.33. Two carry a total life insurance of \$400. None belong to benefit societies. Six had good health when they began work and 1 poor. All now have good health. One cannot read or write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accident to themselves or others. None reported a decrease of wages during the past 5 years, 4 reported an increase, 2 the same and 2 did not answer. Five pay cash when they purchase goods, and 2 did not answer. None keep an itemized account of their expenses. All are better off than they were 5 years ago.

The canvass of the women resulted as follows: Nationality: Americans, 5; Hollanders, 1. Parentage of those born in the United States: American, 2; German, 3. One is married and 5 are single. All support themselves only. Number of months employed during the year, 65, an average of 10.8+. During the year 5 lost time amounting to 182 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$1,224. Annual family expense \$191. One rents and pays \$6 per month. One takes 2 weekly papers. Four live at home and give their wages to their parents and one pays \$1.50 per week board. Five had good health when they began work and 1 did not answer. All have good health at the present time. All can read and write. None are subject to loss by error, waste or breakage. None are required to exercise more than ordinary care to prevent accident. Two reported wages increased during the past 5 years, 2 the same, 1 did not answer and 1 has been in this country less than one year. One pays cash when she purchases goods and 5 did not answer. None keep an itemized account of their expenses. Four are as well off as they were 5 years ago, 1 did not answer and 1 has been in this country less than one year.

VALLEY CITY TABLE CO.,

Manufacturers of parlor tables and office desks. Wholesale value of goods manufactured during the past fiscal year, \$25,000. Number of employees, 31. Total amount of wages paid during the past fiscal year, \$10,400. Number of employees canvassed by this bureau, 12. Nationality: Americans, 9; Hollanders, 1; Germans, 1; Irishmen, 1. Parentage of those born in the United States: American, 7; Holland, 2. Six are married and 6 single. There are 6 children in the families, of which 8 attend school. Six employees support themselves only, while 6 support, other than themselves, 12 persons. Total number of months employed during the year, 184, an average of 11.1+. During the year 10 men lost time amounting to 260 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$5,812. Three employees paid \$12 for working tools during the year. Total annual family expense, \$3,555. Three of the employees live at home and give their wages to their parents. During the year 1 man saved \$150. One man has \$25 at interest. Five own homes valued at \$6,050. Of those owning homes 4 are mortgaged for \$1,550. Two rent and pay a monthly rental of \$14.50, an average of \$7.25. Six families own sewing machines, and 3 persons have organs. Five take newspapers and magazines: 5 dailies and 3 weeklies. Three board and pay \$12 per week, an average of \$4. Two carry a total life insurance of \$3,500. Two belong to benefit societies, representing a weekly sick benefit of \$10, an average of \$5. Eleven

had good health when they began work, and 1 did not answer. Present state of health : 11 good, and 1 did not answer. All can read and write. None are subject to loss of wages by error, waste or breakage. Three are required to exercise more than ordinary care to prevent accidents. Three reported wages decreased during the past 5 years, 3 increased, 8 the same and 8 did not answer. Seven pay cash when they purchase goods and five did not answer. One keeps an itemized account of his expenses. Ten are as well off as they were five years ago, and 2 are not.

SUMMARY FOR GRAND RAPIDS.

Twenty-eight factories were canvassed in Grand Rapids. To our request for the wholesale value of goods manufactured during their fiscal year, the total number of employes and the total amount of wages paid, the following seven firms failed to make returns to this bureau: Nelson, Matter & Co., The Sligh Furniture Co., M. L. Sweet, Stowe & Davis Furniture Co., Universal Tripod Co., Grand Rapids Cabinet Co., and the Wolverine Chair Co. The following firms gave the desired information: Widdicombe Furniture Co., Phoenix Furniture Co., Berkey & Gay, Bissell Carpet Sweeper Co., Grand Rapids Chair Co., Grand Rapids Refrigerator Co., McCord & Bradfield Furniture Co., Oriol Cabinet Co., Grand Rapids School Furniture Co., Kent Furniture Co., W. A. Berkey, New England Furniture Co., Grand Rapids Folding Chair and Table Co., Worden Furniture Co., Grand Rapids Veneer Works, Peninsular Furniture Co., Grand Rapids Parlor Furniture Co., Z. E. Allen, Valley City Rattan Works and the Valley City Table Co. The 21 firms last enumerated had 4,083 employes upon their pay-rolls on the first pay day in May, 1889. The total wholesale value of goods manufactured during their fiscal year was \$4,558,471. The total amount of wages paid was \$1,680,858, amounting to \$416.77 per capita (man, boy and girl) per year. The wages paid amounted to .86+ per cent of the wholesale value of the goods produced.

In the 28 factories the special agents of this bureau made a canvass of 2,929 men and boys and 52 girls. The canvass of the men and boys resulted as follows: Nationality: Americans, 1,029; Hollanders, 1,109; Swedes, 119; Germans, 288; Polanders, 40; Scotchmen, 22; Russians, 22; Englishmen, 50; Canadians, 124; Frenchmen, 4; Danes, 32; Norwegians, 18; Austrians, 24; Irishmen, 34; Belgians, 4; Brazilians, 2; Welshmen, 1; Finlanders, 1; did not answer, 1; Swiss, 4; West Indies, 1; born on the ocean, 2; Bermuda Islander, 1; Central American, 1; Isle of Man, 1. Of the employes .64+ per cent are foreign born. Parentage of those born in the United States: American, 506; Holland, 190; German, 153; English, 45; Irish, 69; Polish, 8; not answered, 1; Canadian, 16; Scotch, 15; Austrian, 8; French, 14; Russian, 1; Danish, 2; Norwegian, 1; Swedish, 1; Welsh, 1; Belgian, 1; Spanish, 1; New Zealand, 1. Of the 1,029 employes who are reported as having been born in the United States, .50+ per cent had foreign parents.

Of the total number of employes canvassed 1,453 are married, 69 are widowers and 1,407 are single. Fifty-one per cent are married (including the widowers as having families). There are 8,625 children in the families, of which number 1,973 attend school. One thousand three hundred and eighty-two employes support themselves only, while 1,547 support, other than themselves, 4,977 persons. Total number of months employed during the year, 80,963, an average of 10.5+; 2,084 employes lost time during the year amounting to 77,608 days. All of the factories work 10 hours a day. All pay their employes in cash. All pay weekly except the Phoenix Furniture

Co., Grand Rapids Chair Co., Kent Furniture Co., W. A. Berkey and the Peninsular Furniture Co., who pay semi-monthly. The total annual earnings is \$1,250,490, amounting to \$426.93 per capita (man and boy) per year. Of the foreigners 257 are not naturalized. Three hundred and twenty-three had money upon arrival in this country amounting to \$39,574.15. Eighty-four have sent money to relatives and friends in the old country amounting to \$6,880. Seventeen per cent of the foreigners had money upon arrival in this country. Six hundred and twenty-five of the employes paid \$4,853.35 for working tools during the year. Total annual family expenses, \$671,683, amounting to \$102.94 per capita. Five hundred and fifty-seven of the employes live at home and give their wages to their parents, which is .19+ per cent of the employes. Five hundred and sixty saved \$60,685 during the year, which included payments upon homes; .19+ per cent of the employes saved money. Only .04+ per cent of the total annual earnings were saved. Two hundred and forty-five have money in savings banks or at interest amounting to \$70,523. Seven hundred and eighteen own homes valued at \$350,670.

Of the employes 19 years of age and over, .31+ per cent own homes. Four hundred and ninety-two of those owning homes are mortgaged for a total of \$230,517. Seven hundred and fifty-two rent and pay a total monthly rental of \$5,002.83, an average of \$6.59. The total annual rent amounts to \$60,033.96, an average of \$79.83. The per cent of rent to annual earnings is .15+, and the per cent of rent to family expenses is .18+. Of the families, .51 per cent rent. One thousand and twenty-seven families own sewing machines, which is .69+ per cent. One hundred and fifty employes own organs, 58 pianos, 1 a piccolo, 11 melodeons, 3 harmonicas, 4 guitars, 3 banjos, 4 cornets, 3 horns, 3 flutes, 1 a clarinet, 10 accordions, 1 a drum and cymbals, 1 a zither, and 5 violins; .05 per cent own musical instruments. One thousand three hundred and eighty-three take newspapers and magazines, which is .47+ per cent of the whole number of employes. Seven hundred and fifty daily papers are taken; 1,247 weeklies, 2 semi-monthlies, and 196 monthlies. Eight hundred and thirty-five board, which is .28 per cent of the employes. The total weekly cost for board and room is \$3,153.94, an average of \$3.77. Total annual board, \$37,847.28. Three hundred and thirty-two carry life insurance, which is .11+ per cent of the employes. The total life insurance is \$507,016. Eight hundred and thirty-six belong to benefit societies, which is .28 per cent of the employes. The total weekly benefit, in case of sickness or accident, amounts to \$5,000.98, an average of \$5.98. Two thousand eight hundred and eighty-nine had good health when they first began work, 10 fair, 22 poor, and 8 did not answer. Present state of health: 2,605 good, 208 fair, 108 poor, and 8 did not answer. One hundred and seventy cannot read and 200 cannot write. Fifty-four are subject to loss of wages by error, waste or breakage, 2,738 are not, and 187 did not answer. Four hundred and ninety are required to exercise more than ordinary care to prevent accident to themselves or others, 2,301 are not, and 138 did not answer. Four hundred and thirty-three reported a decrease of wages during the past five years, 1,019 an increase, 799 the same, 330 did not answer, 276 are boys under 16 years of age, and 72 have been in this country less than one year.

Those who reported a decrease of wages gave as a reason: Seventy-six competition, 36 change of occupation, 53 gave no reason, 72 emigration, 5 made more at piece work, 10 change of work, 8 monopoly, 42 surplus labor, 4 dull times, 5 change of business, 2 change of position, 1 over production, 7 child labor, 4 don't know, 5 hard times, 2 under consumption, 1 failure of the 8-hour movement, 1 less business, 1 ability, 1 sickness, 3

change of location, 3 cut down, 11 machinery, 1 foreign labor, 1 monopoly and ignorance, 1 competition and monopoly, 1 prices going down, 13 too many men, 3 change of country, 2 change of employers, 5 change from piece to day work, 1 too many men after my job, 2 change, 3 disabled, 3 less wages, 1 less work, 1 child labor and competition, 5 less demand, 1 change of firm, 1 child and woman labor, 3 cut in wages, 1 change of shop, 2 surplus of workmen, 1 change of place, 3 cheap labor, 1 less responsible position, 6 formerly worked at piece work, 2 less demand for goods, 2 change of situation, 1 poor health, 1 too many apprentices, 1 misfortune, 1 slack business, 2 less demand for workmen, 1 firm cutting down, 1 pauper labor, 2 dissipation, 1 competition, emigration and avarice of the rich, 1 too many idle men, 1 over production of labor, 1 monopoly, child labor and emigration.

Those who reported an increase of wages gave as a reason : Two demand and ability, 294 more skillful, 52 labor unions, 65 more ability, 13 better and more work, 50 better work, 36 gave no reason, 15 more experience, 8 change of work, 9 promotion, 15 more work, 2 change of occupation, 2 competition. 1 more business, 1 business better, 1 Harrison's election, 3 change of location, 1 am older, 37 organization of labor, 1 improved in work, 185 increased skill, 1 increased sales, 1 am foreman, 2 don't know, 8 more demand, 1 I do more, 2 advanced position, 2 greater demand, 3 am worth more, 2 change of country, 1 better class of work, 1 advanced, 3 more demand for work, 2 greater demand for good work, 3 were learning trade, 1 raise from 8 to 10 hours, 2 more demand for my labor, 20 the eight hour movement, 2 the strike, 1 the strike and the eight hour movement, 8 better wages, 1 experience and eight hours, 1 skill and the union, 1 general raise, 1 organization of labor and demand, 1 labor union and demand for good work, 1 skill and respect for old age, 1 I do more work, 1 more competent, 2 more responsibility, 1 better times, 1 skill and work more, 1 emigration, 1 better goods made, 1 change of business, 1 more useful, 1 more demand for men, 119 faithfulness, 1 true laboring, 1 more efficient, 1 stronger trade organization, 3 greater demand for carving, 1 better pay, 1 better wages than in Sweden, 8 more demand, 2 better job, 1 am better workman, 1 have learned the trade, 1 demand for better goods, 1 Democratic president, 1 change of employer, 1 greater demand for production. One thousand eight hundred and forty of the employees pay cash when they purchase goods, 36 pay cash and by on credit, 255 buy on credit, and 798 did not answer the question.

Two hundred and fifty-seven keep an itemized account of their expenses, 2,111 do not, 561 did not answer. One thousand eight hundred and nine are as well off as they were 5 years ago, 268 are not, 275 are better off, 229 did not answer, 276 are boys under 16 years of age and 72 have been in this country less than one year. Those who said that they were not as well off gave the following as a reason : Forty-nine financially, 1 lost property by speculation, 3 less wages and higher cost of living, 57 lower wages, 6 less wages and less work, 23 sickness, 23 gave no reason, 1 larger family, 2 poor health, 2 larger expenses, 3 in debt, 2 lost property, 6 lost money, 1 deformed, 6 unsteady work, 1 cost more to live, 1 physically, 1 less wages and poor health, 10 less work, 3 physically and financially, 1 only work 9 hours and used to work twelve, 1 sickness and less demand for work, 1 laid off too much, 1 extra expense by father's death, 1 my credit is too good, 1 much misfortune in my family, 4 change in location, 8 change of occupation, 12 misfortune, 1 misfortune and sickness, 1 too many doctor's bills, 1 dissipation, 1 crippled for life, 1 increase in family and no increase in wages, 1 my father died and I have to support the family, 1 lost in speculation, 1 out of work, 1 had money at interest, 1 lost \$3,000, 2 lost money in business, 1 lost house and lot by bad calculation,

1 lower price of property, 1 less money by fraud of others, 2 lost money in speculation, 1 loss of limb, 1 gambling, 1 more expense, 1 change of business, 1 change of work, 1 less wages and unsteady work, 1 don't know, 3 poor calculation, 1 injured by machinery, 1 lower wages and higher taxes, 1 less steady work, 1 changes, 1 sickness and less wages, 1 lost health and property, 1 too many applications for work, 1 credit in business, 1 badly crippled, 1 badly in debt on account of sickness, 1 less wages and pay more for board, 1 machinery, 1 domestic trouble and larger family, 1 less wages and loss of property.

When about one-half the canvass had been made, our special agents began to inquire of the employees if they were in favor of 8 hours as a day's work. One thousand four hundred and ninety-eight were interrogated. Their responses were as follows: 1,344 yes, 144 no, 4 don't know, 2 can't say, 1 don't care, and 3 preferred a Saturday half holiday.

Among the employees canvassed in Grand Rapids were 53 girls; 25 with the Bissell Carpet Sweeper Co., 21 with the Grand Rapids Chair Co., and 6 with the Valley City Rattan Works. Nationality: American, 29; Holland, 14; German, 8; Polish, 1; English, 2; Canadian 3. Of the girls, 44+ per cent are foreign born. Parentage of those born in the United States: American, 16; Holland, 5; German, 6; Scotch, 2. Two are married and fifty are single. Fifty-one support themselves only, while 1 girl supports 1 other person. Total number of months employed during the year, 518½, an average of 9.8+. Forty-three girls lost time during the year amounting to 1,421 days.

The total annual earnings is \$10,817, amounting to \$198.40 per capita, or \$3.81 per week. All work 10 hours per day and are paid in cash. Total annual family expenses, \$889. Thirty-three live at home and give their wages to their parents, which is .63+ per cent of the girls. Six saved \$402 during the year, and 1 has \$75 at interest. Two rent, 1 paying a monthly rental of \$12 and 1 \$6. Five own sewing machines, 1 an organ and 1 a piano. One takes two weekly papers and 1 a monthly magazine. Nine board and pay \$30 per week, an average of \$4.27. One has \$150 life insurance. Two belong to benefit societies and receive \$3.50 each per week in case of sickness or accident. Fifty-one had good health when they began work and 1 did not answer. Present state of health: Fifty good, 1 fair and 1 poor. Four cannot read and 5 cannot write. Two are subject to loss of wages by error, waste or breakage, 50 are not. Five are required to exercise more than ordinary care to prevent accidents to themselves or others, 44 are not and 3 did not answer. Seven reported an increase of wages during the past 5 years, 22 the same, 10 did not answer and 18 were girls under 16 years of age. Those who reported an increase gave as a reason: 5 more skillful, 1 do better work, 1 more experience. Four pay cash when they purchase goods and 48 did not answer. None keep an itemized account of their expenses. Twenty-seven are as well off as they were 5 years ago, 12 did not answer and 18 are girls under 16 years of age.

FURNITURE MANUFACTURING INDUSTRY

FOR

DETROIT.

TABLE No 9.—Showing individual reports of the employees

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
M. J. MURPHY & Co.													
Machine hand...	15	Michigan	U. S.	s	3	0	0	2	3	9	78	no work	\$3 50 w
Cabinet-maker...	43	Germany	Germany	m	3	0	3	13	8	12	...	shut down	10 00 "
Foreman...	43	New York	Ireland	m	2	1	3	17	3	11	26	shut down	8 00 d
Laborer...	14	Michigan	Poland	s	...	...	0	4m	2m	4	...	first work	2 00 w
Machine hand...	30	"	Germany	s	...	...	0	1m	1m	10	52	not answered	1 25 d
" "	23	"	"	s	...	...	1	3	3	11	26	shut down	2 00 "
" "	30	Ohio	U. S.	s	...	...	0	2	2	11	26	"	2 00 "
" "	22	Michigan	Germany	s	...	...	0	2½	2½	10	52	no work	2 00 "
Laborer...	50	Germany	"	m	2	0	3	25	2m	6	156	"	1 00 "
Chair-maker...	23	"	"	s	...	...	0	7	7	11	26	"	9 00 w
Machine hand...	16	"	"	s	...	...	0	3	3	11	26	shut down	4 00 "
" "	37	"	"	m	0	0	1	10	3	11	26	"	1 50 d
Laborer...	30	Canada	Canada	m	2	1	3	20	2m	2	...	first wrk in U.S.	1 25 "
" "	21	Germany	Germany	s	...	...	0	...	4	11	26	shut down	1 25 "
Machine hand...	18	New York	"	s	...	...	0	3	3	11	26	"	7 50 w
Machinist...	36	Michigan	Holland	m	2	1	3	18	3	12	...	no work	2 50 d
Bender...	23	Germany	Germany	m	0	0	1	1m	1m	6	156	shop closed	1 25 "
Machine hand...	16	"	"	s	...	...	0	3	3	11	26	no work	1 00 "
" "	25	"	"	s	...	...	0	3	1½	10	52	sickness	9 00 w
Office boy...	14	"	"	s	...	...	0	1	1	10	52	"	1 50 "
Machine hand...	20	"	"	s	...	...	0	3	3	11	26	no work	1 50 d
" "	31	"	"	m	4	0	5	3	3	12	...	"	1 50 "
" "	34	New York	U. S.	s	...	...	0	4	4	12	...	"	1 25 "
" "	56	Germany	Germany	m	3	0	1	...	3	11	26	shut down	7 00 w
" "	17	Michigan	"	s	...	...	0	¾	¾	6	156	no work	8 50 "
Finisher...	42	Germany	"	m	2	0	3	22	1½	12	...	shut down	10 50 "
" "	16	"	Poland	s	...	...	0	3	2	11	26	"	2 75 "
Wire-hand...	18	"	Germany	s	...	...	0	¾	¾	12	...	"	4 50 "
Finisher...	19	"	"	s	...	...	0	5	5	8	104	no work	4 50 "
Spring-presser...	18	Poland	Poland	s	...	...	0	1	1	10	52	"	1 75 "
Laborer...	39	Germany	Germany	m	2	0	3	9	9	11	26	shut down	8 00 "
Spring-presser...	15	Michigan	"	s	...	...	0	1m	1m	8	104	no work	1 50 "
Laborer...	21	"	"	s	...	...	0	3	3	8	156	sickness	9 50 "
Wire-stretcher...	14	Germany	"	s	...	...	0	1½	1½	11	26	shut down	3 25 "
Foreman...	49	France	France	m	0	0	1	35	4	12	...	"	3 00 d
Upholsterer...	22	Germany	Germany	s	...	...	0	¾	¾	10	52	no work	10 00 w
Packer...	14	N. Scotia.	Scotland	s	...	...	0	1	1	12	...	"	1 50 "
Shipper assistant...	15	Germany	Germany	s	...	...	0	1	1m	11	26	no work	8 00 "
Turner...	16	"	"	s	...	...	0	2m	2m	6	156	"	2 50 "
" "	16	Michigan	"	s	...	...	0	1m	1m	12	...	"	2 50 "
Packer...	14	Poland	Poland	s	...	...	0	1½	1½	11	26	shut down	1 50 "
Chair-maker...	21	Michigan	U. S.	s	...	...	0	1m	1m	7	130	no work	1 25 d
Machine hand...	18	"	"	s	...	...	0	2½	2½	26	...	"	6 00 w
" "	16	"	Germany	s	...	...	0	2	2	...	52	"	4 50 "
" "	17	"	U. S.	s	...	...	0	1½	1½	...	26	"	3 50 "
" "	31	Ireland	Ireland	s	...	...	1	5m	1½	...	26	shut down	1 50 d
Chair-maker...	27	Canada	"	m	1	0	2	1½	1½	...	52	no work	1 50 "
Machine hand...	17	Michigan	U. S.	s	...	...	0	3	1	...	26	shut down	5 00 w
" "	18	"	Germany	s	...	...	0	1m	1m	...	73	no work	1 00 d
" "	22	Germany	"	s	...	...	0	5½	5½	...	26	shut down	9 00 w
" "	14	Michigan	"	s	...	...	0	1	1	...	26	"	3 00 "
" "	19	Germany	"	s	...	...	0	2	2	...	26	"	1 25 d
" "	15	"	"	s	...	...	0	3½	3½	...	52	no work	3 50 w
" "	15	"	"	s	...	...	0	2w	2w	...	26	"	2 00 "

in the Furniture Manufacturing Industry in Detroit.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$136			*	0	no			no	none				*				13
530		\$420	\$100	0	\$3,500			yes	"					\$2,000			18
858		758	100	\$800	no		\$18 00		"	1	2			1,000	2	\$10 00	10
84			*	0	"			no	"				*				13
826			*	0	"				guitar				*				12
572		372	200	125	1,400			yes	none								14
572			100	100	no			no	"	1			\$3 50				21
520			35	35	no			no	violin				3 50				17
156	0	156	0	0	700	\$200	2 00	"	none				8 50				15
429			0	0	250			"	"								15
191			*	0	no			"	"				*				14
439		329	100	100	1,200	400		yes	violin								15
65	0	65	0	0	no		11 00	yes	none					2,000	1	10 00	10
357	0		100	0	no			no	"				8 00				14
357			0	0	"			"	"	1			†				12
780		780	0	0	"		9 00	yes	"	1	2			2,000	1	5 00	14
195		195	0	0	"		5 00	no	"		1						14
238			*	0	"			"	"				*				12
300	0		* 0	0	"			"	"				8 50				14
65			*	0	"			"	"								13
429			0	60	"			"	"				8 00				16
468	\$100	468	0	140	"		4 50	yes	"								12
300			0	17	"			no	"				8 50		1	5 00	15
334	0	334	* 0	0	1,200			"	"	1				66			14
91			*	0	no			"	"	1			*				14
546		546	0	0	1,100	400		yes	"	1							19
179			* 0	0	no			no	"				*				13
234			* 0	0	"			"	"				2 50				13
153			*	0	"			"	accord'n	1			*				14
76			*	0	"			"	none				*				12
381	0	381	* 0	0	1,100	900		yes	"		1			600	1	5 00	18
52			* 0	0	no			no	"				*				14
247			75	0	"			"	"				*				16
155			* 0	0	"			"	violin				*				13
936		936	0	400	4,500			yes	"	1					2	10 00	14
433			* 0	0	no			no	guitar				4 00				15
78			*	0	"			"	"				*				12
143			*	0	"			"	"				*				12
65			*	10	"			"	organ	1			*				14
130			*	0	"			"	none				*				13
71			*	0	"			"	"								18
227			0	0	"			"	"		1		2 50		1	5 00	12
236			0	0	"			"	"		1		2 00				15
195			0	0	"			"	"				2 00				14
167			0	0	"			"	"	1	1		2 50				12
429	0		0	0	"			"	"				3 75				12
390	0	390	0	75	"		8 50	"	"	1				2,000	1	10 00	13
238			0	0	"			"	"				2 00				14
234			80	270	"			"	"	1			†				14
429			*	0	"			"	"				*				14
143			*	0	"			"	"				*				13
357			*	0	"			"	"				*				14
152			*	0	"			"	"				*				12
96			*	0	"			"	"				*				12

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Occi

Labor

Chair-

Machi

Chair-

Packer

Chair-

Packer

Machi

Varnis

Chair-

Machi

Packer

Machi

Chair-

Packer

Chair-

Labor

Chair-

Machi

Packer

Labor

Machi

Chair-

Machi

Carpei

Chair-

Chair-

Turner

Carpei

Labor

Machi

Chair-

Labor

Forem

Turner

Chair-

Machi

Labor

Machi

Labor

Machi

Labor

Labor

Labor

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.	
										Daily papers.	Weekly papers.	Magazines.						
\$286	0	\$236	0	0	no		\$4 00	no	none								18	
290	0	290	0	0	"		3 50	"	"								13	
156			*	0	"			"	"			*					13	
500		500	0	0	"		6 00	yes	"			*					26	
80			*	0	"			no	"			2					16	
224			0	0	"			"	"			1	1	\$2 50			12	
143			*	0	"			"	"					*			13	
286			*	0	"			"	"					*			13	
6			*	0	"			"	"					*			14	
39			*	0	"			"	"					*			14	
347			0	0	"			"	"			1	1	+			12	
173			0	0	"			"	"					2 00			15	
214			*	0	"			"	"			1			\$1,000		14	
104			*	0	"			"	"					*			14	
156			0	0	"			"	"					*			14	
3			*	0	"			"	"					*			18	
286			0	0	"			"	"					2 50			18	
312			*	0	"			"	"					*			15	
624		449	\$175	0	"		6 00	"	organ			1		*			14	
195			*	0	"			"	none					*			14	
143			*	0	"			"	"					*			11	
236			*	0	"			"	"					*			12	
167			*	0	"			"	"					*			13	
95			*	0	"			"	"					*			13	
6			*	0	"			"	"					*			18	
515			0	0	"			"	"			2	2	4 50			18	
156			*	0	"			"	"					*			14	
52			*	0	"			"	"					*			14	
498		498	0	0	"		9 00	"	"			1	2	1			13	
546		546	0	0	"	\$1,200		"	"			1	1		1	\$3 00	11	
619			30	30	no			"	guitar			1		+			15	
282	0		20	0	"			"	none					3 00			14	
156	\$400		0	0	2,500	\$2,300		"	organ			1		3 00	1,000		14	
429			0	0	no			"	none					4 00			15	
477			50	30	1,000			"	violin				1	8 50			16	
477	0	477	0	0	1,100	120		yes	none			1				1	5 00	14
143			*	0	no			no	"					*			18	
643		643	0	0	1,700			yes	"			1			1,000	1	5 00	12
86			*	0	no			no	"					*			18	
286	150	286	0	0	"		5 00	"	"								16	
429			*	0	"			"	"					*			15	
397		747	150	0	"		14 00	yes	organ			1	3		4,000	2	10 00	17
429			0	0	"			no	none					3 50			15	
477			50	25	"			"	"					3 50	1,000	1	5 00	17
548			0	0	"			"	"								18	
152			*	0	"			"	"					*			13	
290			*	0	"			"	"					*			16	
390			*	0	"	1,500		"	"			1		*			14	
136			0	0	no			"	"					2 50			15	
182			*	0	"			"	"					*			18	
260	800		50	0	"			"	"					2 00			18	
702		702	0	0	"		16 00	yes	"			1	2		3,000	1	15 00	15
290	16		100	100	"			no	"					2 50			15	
234		284	0	0	900	150		"	"								17	
234			0	0	no			"	"					3 00			14	

* Gives wages to parents and lives at home.

† Lives at home and pays no stated amount.

TABLE No. 9.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	No. of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Chair-maker	31	Mass.	U. S.	m	1	0	2	3	3	11	26	shut down	\$12 00 w
Machine hand	30	Michigan	Germany	m	1	0	2	7	7	11	26	no work	18 50 w
"	18	"	Germany	s	"	"	0	2	2	11	"	"	4 50 "
"	19	Germany	"	s	"	"	0	4	1w	7	130	"	1 00 d
Chair-maker	22	"	"	s	"	"	1	1	1	10	52	"	1 35 "
Machine hand	20	Michigan	U. S.	s	"	"	0	6	2	11	26	"	9 00 w
Chair-maker	19	"	Germany	s	"	"	0	1w	1w	9	78	"	5 00 "
Rime-bender	30	Germany	"	m	1	0	2	4m	4m	10	52	"	1 25 d
Machine hand	21	Michigan	"	s	"	"	0	4	4	8	104	"	1 25 "
Laborer	30	Poland	Poland	m	2	0	3	"	2m	8	104	"	1 00 "
Machine hand	23	Germany	Germany	m	1	0	2	6	6	11	26	"	1 00 "
Turner	43	"	"	m	2	1	2	20	3	11	26	shut down	15 00 w
Packer	14	Michigan	Poland	s	"	"	0	1	1	11	26	"	2 00 "
Machine hand	35	New York	U. S.	s	"	"	0	1m	1m	12	"	"	9 00 "
Upholsterer	16	Michigan	England	s	"	"	0	1	1	11	26	shut down	3 00 "
Stock clerk	33	England	"	m	0	0	1	2m	2m	8	104	no work	1 50 d
Packer	14	Ohio	France	s	"	"	0	2d	2d	11	26	"	2 00 w
"	15	"	Germany	s	"	"	0	2	2	11	26	shut down	3 50 "
"	14	Michigan	Poland	s	"	"	0	1	1	11	26	"	1 50 "
"	15	Poland	"	s	"	"	0	"	1d	10	52	no work	1 50 "
"	14	Michigan	Germany	s	"	"	0	1m	1m	10	52	"	1 75 "
"	14	"	England	s	"	"	0	2	2	11	26	shut down	3 50 "
"	14	"	Poland	s	"	"	0	1	1	11	26	"	1 50 "
Tacker	17	Germany	Germany	s	"	"	0	3	3	11	26	not answered	5 00 "
Laborer	14	Michigan	Poland	s	"	"	0	2w	2w	12	"	"	2 00 "
"	17	"	Germany	s	"	"	0	2½	2	9	78	no work	6 50 "
Wire turner	21	"	Ireland	s	"	"	0	4	4	11	26	shut down	11 00 "
Laborer	13	Germany	Germany	s	"	"	0	3w	3w	¾	"	first work	2 00 "
Machine hand	18	Poland	Poland	s	"	"	0	8m	8m	11	26	shut down	75 d
Finisher	16	Germany	Germany	s	"	"	0	3	3	11	26	"	4 00 w
"	17	Mass.	U. S.	s	"	"	0	1½	1½	11	26	"	5 00 "
Machine hand	15	Germany	Germany	s	"	"	0	2m	2m	8	104	no work	3 00 "
Foreman	28	Michigan	U. S.	m	1	0	2	6	3	10	52	not answered	15 00 "
Tacker	17	Germany	Germany	s	"	"	0	4	4	11	26	shut down	1 25 d
Laborer	33	Michigan	England	s	"	"	0	2½	2½	11	26	no work	8 00 w
Finisher	18	"	Germany	s	"	"	0	2	2	11	26	shut down	4 00 "
"	16	Germany	"	s	"	"	0	2	2	11	26	"	3 50 "
Machine hand	14	Michigan	"	s	"	"	0	1½	1½	11	26	"	2 50 "
"	15	"	"	s	"	"	0	1½	1½	11	26	"	2 50 "
"	14	Germany	"	s	"	"	0	4	4	11	26	"	3 00 "
Stainer	13	Poland	Poland	s	"	"	0	¾	¾	3	"	first work	1 50 "
Finisher	16	Germany	Germany	s	"	"	0	1	1	11	26	shut down	4 00 "
Packer	15	Michigan	Poland	s	"	"	0	1	1	11	26	"	1 75 "
Chair-weaver	15	"	"	s	"	"	0	¾	¾	10	52	no work	1 75 "
"	16	"	Germany	s	"	"	0	3	3	11	26	shut down	3 00 "
"	16	"	"	s	"	"	0	2w	2w	¾	"	first work	1 50 "
"	15	N. J.	"	s	"	"	0	2	2	11	26	shut down	3 00 "
"	15	Poland	Poland	s	"	"	0	1	1	11	26	"	2 50 "
"	14	Michigan	Germany	s	"	"	0	2m	1	11	26	"	3 00 "
"	16	"	Poland	s	"	"	0	2	2	11	26	"	3 00 "
"	14	"	Germany	s	"	"	0	1m	1m	1	"	first work	1 10 "
"	15	"	Poland	s	"	"	0	1½	1½	11	26	shut down	4 00 "
"	19	"	Germany	s	"	"	0	3	3	11	26	"	3 00 "
"	14	"	Poland	s	"	"	0	2m	2m	2	"	first work	2 50 "
"	15	Germany	Germany	s	"	"	0	2	2	11	26	shut down	2 50 "

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.					
2572		\$372	0	0	\$1,800	\$1,700		yes	clarn't	1	1				8
643		568	\$75	\$75	no		\$8 50	"	guitar	1					13
214			0	0	"			no	none	1					12
183			0	0	"			"	"						12
226		275	80	0	500	200		"	"						13
422			0	0	no			"	"						12
196			0	0	"			"	"						12
325	900	325	0	0	"		8 00	"	"						13
280			0	0	"			"	"	1	1				13
208	3	208	0	0	"		3 50	"	"						13
288	0	288	0	0	"		6 00	yes	"	1					12
715		715	0	0	"		10 00	no	organ	1					12
98			0	0	"			"	none						13
468			200	0	1,500			"	organ	1					13
142			0	0	no			"	guitar						13
812		812	0	0	"		8 00	"	none	1					13
95			0	0	"			"	"						13
107			0	0	"			"	"						13
71			0	0	"			"	"						13
65			0	0	"			"	"						13
78			0	0	"			"	"						12
167			0	0	"			"	guitar	1					12
71			0	0	"			"	none						13
238			0	0	"			"	"	1					14
104			0	0	"			"	"						13
258			0	0	"			"	"	1					14
524			0	0	"			"	"	1	1		5 00	102	16
6			0	0	"			"	"						13
214			0	0	"			"	"						15
191			0	0	"			"	"						13
239			0	0	"			"	"	1					14
104			0	0	"			"	"						13
850		850	0	0	"		15 00	yes	piano	1					15
257			0	0	"			no	none	1			3 50		13
281			25	0	"			"	"	1	1	1	3 50		11
191			0	0	"			"	"						13
167			0	0	"			"	"				2 50		14
119			0	0	"			"	"						12
119			0	0	"			"	"						14
143			0	0	"			"	"						10
19			0	0	"			"	"						13
191			0	0	"			"	"						15
63			0	0	"			"	"						13
78			0	0	"			"	"						13
143			0	0	"			"	"						13
9			0	0	"			"	"						16
143			0	0	"			"	"						13
119			0	0	"			"	"						14
143			0	0	"			"	"						12
143			0	0	"			"	"						13
6			0	0	"			"	"						13
191			0	0	"			"	"						13
143			0	0	"			"	"						14
22			0	0	"			"	"						13
119			0	0	"			"	"						13

* Gives wages to parents and lives at home.

TABLE No. 9.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for living the year.	Cause for loss of time.	Wages received.
Chair-weaver	15	Poland	Poland	•	•	•	•	shut down	\$4 50
Chair-maker	12	"	Germany	•	•	•	•	"	3 50
Chair-weaver	•	"	"	•	•	•	•	first work	75 "
"	•	"	"	•	•	•	•	no work	3 00
"	•	"	"	•	•	•	•	"	3 50
"	•	"	"	•	•	•	•	shut down	4 50
"	•	"	"	•	•	•	•	no work	3 50
"	•	Poland	"	•	•	•	•	shut down	1 50
"	•	Germany	"	•	•	•	•	"	1 50
"	•	"	"	•	•	•	•	"	2 50
"	•	"	"	•	•	•	•	first work	2 00
"	•	"	"	•	•	•	•	shut down	4 00
"	•	"	"	•	•	•	•	"	3 50
"	•	Poland	"	•	•	•	•	first work	1 50
"	•	Germany	"	•	•	•	•	shut down	3 50
"	•	Poland	"	•	•	•	•	first work	2 50
Chair-maker	15	Poland	"	•	•	•	•	first work in U.S.	50 "
Chair-weaver	22	Michigan	Switz.	•	•	•	•	shut down	2 00
"	17	"	Germany	•	•	•	•	"	15 00
"	•	"	"	•	•	•	•	"	3 25
"	19	Germany	"	•	•	•	•	"	3 50
"	19	"	"	•	•	•	•	"	4 50
"	18	Michigan	"	•	•	•	•	"	5 00
"	16	Germany	Poland	•	•	•	•	"	3 00
"	18	"	Germany	•	•	•	•	"	4 75
"	16	"	"	•	•	•	•	"	3 00
"	15	Michigan	"	•	•	•	•	no work	1 75
"	17	Poland	Poland	•	•	•	•	shut down	4 50
"	15	Michigan	Germany	•	•	•	•	"	2 25
"	16	Germany	"	•	•	•	•	shut down	3 50
"	16	"	"	•	•	•	•	"	3 50
"	14	"	"	•	•	•	•	first work	2 00
"	16	Michigan	"	•	•	•	•	shut down	2 50
"	16	Germany	"	•	•	•	•	"	3 00
"	15	"	"	•	•	•	•	first work in U.S.	3 50
"	14	"	"	•	•	•	•	first work	1 25
"	21	Michigan	"	•	•	•	•	shut down	3 50
"	19	"	"	•	•	•	•	"	3 75
"	18	Germany	"	•	•	•	•	"	4 00
"	18	"	"	•	•	•	•	"	4 00
"	19	Canada	"	•	•	•	•	first work in U.S.	3 00
"	16	Germany	"	•	•	•	•	shut down	3 50
"	15	"	"	•	•	•	•	"	3 00
"	15	Michigan	"	•	•	•	•	"	3 00
"	20	"	"	•	•	•	•	"	4 00
"	19	Germany	"	•	•	•	•	"	3 50
"	16	"	"	•	•	•	•	not answered	3 50
"	19	"	"	•	•	•	•	shut down	4 50
"	30	Michigan	"	•	•	•	•	"	4 50
"	16	Germany	"	•	•	•	•	"	4 25
"	14	Poland	Poland	•	•	•	•	"	3 00
Machine hand	20	Indiana	Germany	•	•	•	•	"	5 00
Chair-maker	15	Michigan	"	•	•	•	•	"	3 50
Chair-weaver	15	"	"	•	•	•	•	no work	3 50
"	14	"	"	•	•	•	•	shut down	3 00

TABLE NO. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
2314				0	no			no	none								13.
167			*	0	no			no	"								13.
10			*	0	"			"	"								13.
130			*	0	"			"	"								13.
152			*	0	"			"	"				\$3 00				16.
214			*	\$25	"			"	zither				*				13.
136			*	0	"			"	none				*				13.
71			*	0	"			"	"				*				13.
71			*	0	"			"	"				*				12.
119			*	0	"			"	"				*				13.
52			*	0	"			"	"				*				13.
173			*	0	"			"	"				*				12.
180			*	0	"			"	"				*				16.
81			*	0	"			"	"				*				13.
167			*	0	"			"	"				*				14.
22			*	0	"			"	"				*				14.
2			*	0	"			"	"				*				14.
95			*	0	"			"	"				*				15.
572		refuse	refuse	\$1,000	no			"	otto h'p	1			*				14.
155			*	0	"			"	none				*				13.
167			*	0	"			"	"				*				13.
214			*	0	"			"	"				*				13.
238			*	0	"			"	"				*				13.
143			*	0	"			"	"				*				16.
226			*	0	"			"	"				*				13.
143			*	0	"			"	"				*				14.
61			*	0	"			"	"				*				15.
214			*	0	"			"	"				*				13.
117			*	0	"			"	"				*				14.
167			*	0	"			"	"				*				13.
167			*	0	"			"	"				*				13.
43			*	0	"			"	"				*				14.
119			*	0	"			"	"				*				15.
143			*	0	"			"	"				*				15.
65			*	0	"			"	"				*				14.
10			*	0	"			"	"				*				13.
167			*	0	"			"	"				*				18.
179			*	0	"			"	"				*				12.
191			*	0	"			"	"				*				12.
191			*	0	"			"	"				*				13.
11			0	0	"			"	"				2 00				17.
167			*	0	"			"	"				*				12.
143			*	0	"			"	"				*				12.
143			*	0	"			"	"				*				18.
191			*	0	"			"	"				*				18.
167			*	0	"			"	"				*				18.
167			*	0	"			"	"				*				14.
214			*	0	"			"	"				*				14.
214			*	0	"			"	"				*				18.
206			*	0	"			"	"				*				13.
143			*	0	"			"	"				*				13.
238			0	0	"			"	"				†				15.
167			*	0	"			"	"				*				12.
152			*	0	"			"	"				*				12.

* Gives wages to parents and lives at home. † Lives with parents and pays no stated amount.

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

			Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
			s	1		0	0	8	11	28	shut down	\$3 25
			s	1		0	0	8	11	28	"	3 25
			s	1		0	0	8	11	28	"	4 00
			s	1		0	0	8	11	28	"	3 50
			s	1		0	0	8	9	78	no work	0 00
			s	1		0	4	4	11	28	shut down	4 00
			s	1		0	8	8	9	78	no work	4 50
			s	1		0	8	8	9	78	"	3 50
			s	1		0	8	8	11	28	shut down	5 50
			s	1		0	8	8	11	28	"	3 50
			s	1		0	2	2	10	52	no work	5 00
			s	1		0	2	2	10	52	"	3 50
			s	1		0	2	2	11	28	shut down	3 25
			s	1		0	2	2	11	28	"	3 00
			s	1		0	2	2	11	28	"	3 25
			s	1		0	1	1	11	28	"	3 00
			s	1		0	1	1	11	28	"	4 00
			s	1		0	1	1	11	28	"	3 00
			s	1		0	1	1	8	104	no work	4 50
			s	1		0	1	1	7	7	first work	2 75
			s	1		0	1	1	2	2	"	2 25
			s	1		0	1	1	11	28	shut down	2 00
			s	1		0	1	1	11	28	"	3 00
			s	1		0	1	1	11	28	"	2 00
			s	1		0	1	1	8	104	sickness	3 50
			s	1		0	1	1	11	28	shut down	5 00
			s	1		0	1	1	11	28	"	3 50
			s	1		0	1	1	8	26	first work	2 50
			s	1		0	1	1	11	28	shut down	2 50
			s	1		0	1	1	10	52	sickness & no work	3 75
			s	1		0	1	1	1	1	first work	1 75
Chair-weaver	17	Germany	s	1		0	1	1	11	28	shut down	3 50
Finisher	18	Poland	s	1		0	1	1	11	28	"	4 00
	18	Holland	s	1		0	1	1	6	156	worked at home	3 50
"	17	Michigan	s	1		0	1	1	12	78	no work	3 00
"	18	New York	s	1		0	1	1	9	78	"	3 00
"	17	Michigan	s	1		0	1	1	11	28	"	3 00
"	14	Germany	s	1		0	1	1	6	156	"	2 50
Chair-weaver	18	Poland	s	1		0	1	1	11	28	shut down	3 00
Finisher	15	Michigan	s	1		0	1	1	10	52	no work	2 75
Chair-weaver	14	"	s	1		0	1	1	1	1	first work	2 00
Finisher	16	"	s	1		0	1	1	12	52	no work	3 00
"	14	"	s	1		0	1	1	10	52	first work	2 50
"	14	"	s	1		0	1	1	3	1	first work	3 00
Chair-weaver	16	Poland	s	1		0	1	1	11	28	shut down	3 00
"	18	"	s	1		0	1	1	11	28	"	3 50
Finisher	18	Germany	s	1		0	1	1	11	28	"	1 00
"	18	N. J.	s	1		0	1	1	6	104	no work	2 75
Chair-weaver	17	Germany	s	1		0	1	1	11	28	shut down	2 50
"	18	Poland	s	1		0	1	1	11	28	"	3 00
"	19	Germany	s	1		0	1	1	9	78	sick and no work	3 50
"	18	Canada	s	1		0	1	1	11	28	shut down	3 50
Chair-maker	16	Poland	s	1		0	1	1	11	28	"	3 50
Finisher	17	Michigan	s	1		0	1	1	11	28	no work	2 50

TABLE NO. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$155			*	0	no			no	none				*				12
156			*	0	"			"	"				*				14
191			*	0	"			"	"				*				13
167			*	0	"			"	"				*				13
234			\$100	\$125	"			"	organ	1		free	*				15
191			*	0	"			"	none				*				13
175			*	0	"			"	"	1			*				17
138			†	0	"			"	organ	1		\$1 00	*				13
262			*	0	"			"	"	1			*				16
167			*	0	"			"	none				*				14
217			0	0	"			"	piano				†				16
108			*	0	"			"	none				*				14
155			*	0	"			"	"				*				12
143			*	0	"			"	"				*				14
155			*	0	"			"	"				*				13
143			*	0	"			"	"				*				12
191			0	0	"			"	"				1 50				12
143			0	0	"			"	"				2 00				14
155			0	0	"			"	"				*				16
83			*	0	"			"	"				*				14
19			*	0	"			"	"				*				18
95			*	0	"			"	"				*				14
143			0	0	"			"	"				2 00				14
95			0	0	"			"	"				1 50				14
131			0	0	"			"	"				*				12
228			*	0	"			"	"				*				14
167			0	0	"			"	"				free				12
82			0	0	"			"	"				1 50				18
167			0	25	"			"	"				1 75				15
162			0	0	"			"	"				*				11
2			*	0	"			"	"				*				14
167			*	0	"			"	"				*				13
191			*	0	"			"	"				*				18
167			*	0	"			"	"				*				15
91			*	0	"			"	"				*				14
156			*	0	"			"	"				*				13
78			*	0	"			"	"				*				9
443			*	0	"			"	"				*				14
65			0	0	"			"	"				1 50				14
143			0	0	"			"	"				1 50				15
119			*	0	"			"	"				*				14
9			*	0	"			"	"				*				14
155			*	0	"			"	"				*				12
104			*	0	"			"	"				*				12
2			*	0	"			"	"				*				14
14			*	0	"			"	"				*				14
167			*	0	"			"	"				*				13
238			*	0	"			"	"				*				13
95			*	0	"			"	"				*				14
119			*	0	"			"	"				*				15
143			*	0	"			"	"				*				14
138			*	0	"			"	"				*				13
167			*	0	"			"	"				*				14
167			*	0	"			"	"				*				14
119			*	0	"			"	"				*				14

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE NO. 9.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Chair-maker	15	Poland	Poland	s	—	—	0	1m	1m	1	—	first work	\$1 00 w
Finisher	17	Michigan	"	s	—	—	0	1	1	10	52	no work	3 50 " w
"	15	"	"	s	—	—	0	1	1	12	—	"	3 50 "
"	16	Germany	Germany	s	—	—	0	3w	3w	13	—	"	3 00 "
"	13	Michigan	"	s	—	—	0	2w	2w	9	78	no work	2 25 "
"	16	"	"	s	—	—	0	2	2	11	26	shut down	4 50 "
"	15	Holland	Holland	s	—	—	0	4m	4m	10	52	no work	2 75 "
Chair-weaver	18	Germany	Germany	s	0	0	0	2	2	6	156	at home	3 50 "
HARGREAVE'S MANUFACTURING CO.													
Finisher	39	New York	Germany	m	2	2	4	16	15	12	—	—	2 00 d
Gilder	38	Canada	"	m	7	4	8	4m	4m	5	182	no work	1 60 "
Carpenter	87	Germany	"	m	3	3	4	23	10	12	—	no work	1 80 "
Machine hand	15	"	"	s	—	—	0	1	1	11	26	no work	3 00 w
"	38	"	"	m	4	3	5	13	13	10½	39	not answered	2 00 d
Joiner	23	"	"	s	—	—	0	8	8	12	—	—	1 50 "
Cabinet-maker	27	"	"	m	—	0	3	5	1	9	78	no work	1 75 "
Carver	18	"	"	s	—	—	0	6	7	12	—	no work	1 10 "
Laborer	17	"	"	s	—	—	0	3	6	12	—	no work	3 60 w
Machine hand	28	Michigan	"	m	3	0	4	4	4	11	26	not answered	1 60 d
Finisher	19	"	"	s	—	—	0	5	1w	7	130	no work	1 25 "
Gilder	20	"	"	s	—	—	0	4	4	12	—	no work	1 50 "
Polisher	43	England	England	m	1	1	2	4	4	12	—	no work	2 50 "
Cabinet-maker	50	Germany	Germany	m	3	2	3	7	7	13	—	no work	1 60 "
Machine hand	26	New York	England	m	1	0	2	8	2	12	—	no work	1 75 "
Frame-maker	25	Germany	Germany	s	—	—	0	11	5	12	—	no work	1 70 "
Finisher	20	"	"	s	—	—	0	7	7	11½	18	no work	1 60 "
Putty presser	21	"	"	s	—	—	0	8½	8½	9	78	no work	1 37 "
Polisher	2	"	"	s	—	—	0	8	8	10½	39	not answered	1 25 "
Foreman	38	Canada	Ireland	m	2	1	3	25	25	12	—	no work	3 00 "
Finisher	17	Germany	Germany	s	—	—	0	4	4	11½	18	no work	60 "
Carver	20	Michigan	"	s	—	—	0	9	9	11	26	"	1 10 "
Gilder	20	New York	England	s	—	—	2	5	5	11	26	"	8 25 w
Finisher	17	Michigan	Germany	s	—	—	0	8	8	9	78	"	3 00 "
Stenciler	15	"	"	s	—	—	0	8	3	11	26	"	50 d
Finisher	20	Germany	"	m	3	0	4	16	16	12	—	no work	2 25 "
"	21	Poland	Poland	s	—	—	0	3	3	11	26	no work	1 20 "
Filler	15	Germany	Germany	s	—	—	0	1½	1½	10	52	"	2 50 w
"	14	England	England	s	—	—	0	8m	1½	4	208	"	60 d
Polisher	30	Michigan	Ireland	m	4	0	5	16	1	9½	65	"	2 00 "
Machine hand	24	Germany	Germany	s	—	—	2	6	8	11	26	"	1 50 "
Cabinet-maker	27	"	"	m	2	0	3	6	6	10	52	"	1 70 "
"	41	"	"	m	5	1	6	2½	2	10	52	"	1 70 "
"	23	"	"	s	—	—	0	8	1	9	78	"	1 75 "
Gilder	21	Michigan	U. S.	s	—	—	0	8	8	10	52	sick, no work	1 50 "
"	19	"	Germany	s	—	—	0	4	4	12	—	no work	1 45 "
"	16	"	Ireland	s	—	—	0	1	1	12	—	no work	1 00 "
Finisher	21	Germany	Germany	s	—	—	2	8	8	8	104	sickness	1 70 "
"	18	New York	"	s	—	—	0	5	5	11	26	no work	1 00 "
Stainer	21	Germany	"	s	—	—	0	6	½	7	130	sickness	1 06 "
Laborer	40	England	England	m	3	2	4	—	2	12	—	no work	1 37 "
Engineer	52	"	"	s	—	—	0	10	20	12	—	no work	2 50 "
Ornamenter	22	Germany	Germany	s	—	—	0	5	8	12	—	no work	1 50 "
Whitener of frames	18	"	"	s	—	—	0	5	8½	12	—	no work	1 37 "
"	18	"	"	s	—	—	0	4	4	12	—	no work	1 10 "

TABLE No. 9.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
94			*	0	no			no	none				*				14
155			*	0	"			"	"				*				15
183			*	0	"			"	"				*				13
156			*	0	"			"	"				*				14
88			*	0	"			"	"				*				13
214			*	0	"			"	"				*				13
119			*	0	"			"	"				*				13
91			*	0	"			"	"				*				15
634		\$324	0	0	"		88 00	yes	"	1							11
206	\$10	206	0	0	\$1,200	\$900		yes	violin	1							17
562	0	562	0	0	no		7 00	"	none			1		\$2,000	1	5 00	14
145			*	0	no			yes	"				*				14
546	250	546	0	0	1,100	100		no	"					2,000	1	5 00	12
468		468	0	0	no			no	"	1			\$3 50				15
408	80	869	\$50	0	1,000	150		yes	"					600	1	5 00	12
343			*	0	no			no	accord'n				*				11
187			0	0	"			no	none								11
458		458	0	0	"		5 00	yes	"					3,000	1	15 00	13
237			0	0	"			no	"		1		4 00				14
468			20	\$40	"			"	"	2	1		4 00				13
730		730	0	0	1,400		5 00	yes	organ	1	1						13
499	100	499	0	0	no			"	none	1	2				1	5 00	16
546		346	200	0	1,000	800		no	cornet	1	1						15
530			*	0	no			"	none	1	1		*				14
478			*	0	"			"	clarinet				*		1	5 00	13
825			*	0	"			"	horn				*		1	5 00	15
841			*	0	"			"	cornet	1	1	1	*				12
936		936	0	0	2,300			yes	none	1	1						12
129			*	0	no			no	"				*				18
315			17	0	"			"	accord'n				3 00				11
368			0	0	"			"	banjo	1	2		5 00				15
117			*	0	"			"	none				*				14
148			*	0	"			"	"				*				12
702		702	0	0	1,500	600		yes	"					3,000	1	5 00	12
343			*	0	no			no	"		1		*				16
108			*	0	"			"	"				*				14
65			*	0	"			"	"				*				13
494		494	0	0	"			yes	"	1							14
429		429	0	0	1,400	500		no	"		1			600	2	10 00	14
443		443	0	0	800	100		"	violin								21
605	0	605	0	0	no		6 00	"	none	1			8 50		1	5 00	15
409	0		0	0	"			"	"	1			*				14
380			*	0	"			"	"	1				800	1	20 00	13
458			0	0	"			"	"				8 00				13
315			*	0	"			"	"	1			4 00				15
354			0	0	"			"	"				*				13
283			*	0	"			"	"				*				13
182			0	0	"			"	"				8 00				14
429		429	0	0	"		8 00	yes	"	1	1			2,000			12
730	0		refuse	0	"			no	"	2	1	2	4 00		1	5 00	14
468			*	0	"			"	violin				*				14
429			*	0	"			"	none	1			*				13
343			*	0	"			"	"				*				14

* Gives wages to parents and lives at home.

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

TABLE NO. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$468	0	no	.....	.....	no	horn	.....	*	.....	.....	.....	15
430	0	"	.....	.....	"	none	1	.....	.....	.....	.....	13
185	0	"	.....	.....	"	"	.....	*	.....	.....	.....	13
411	0	"	.....	.....	"	"	1	.....	.....	.....	.....	14
430	\$430	0	0	"	.....	\$10 00	yes	organ	1	.....	\$1,000	.....	.....	16
468	0	818	\$150	0	\$2,000	.....	.....	no	none	1	.....	.....	.....	.....	12
390	0	0	no	.....	.....	"	"	.....	\$4 00	.....	.....	.....	12
397	0	277	80	0	800	.....	3 00	"	"	.....	.....	.....	.....	.....	14
328	75	\$10	no	.....	.....	"	guitar	1	3 00	.....	.....	.....	15
715	800	500	"	.....	.....	"	none	2	4 00	.....	.....	.....	16
237	0	0	"	.....	.....	"	"	.....	3 00	.....	.....	.....	12
357	20	0	"	.....	.....	"	"	2	4 00	.....	.....	.....	13
468	78	400	"	.....	.....	"	violin	.....	7 50	.....	.....	.....	14
702	608	100	400	"	.....	8 00	yes	none	1	.....	.....	.....	.....	17
812	*	0	.....	.....	.....	no	"	1	*	.....	.....	.....	11
598	260	75	1,300	\$350	.....	"	"	1	5 00	3,000	1	\$15 00	14
926	200	400	no	.....	.....	"	"	.....	5 00	.....	.....	.....	11
926	926	0	refuse	4,000	1,000	.....	yes	"	2	.....	2,000	.....	.....	11
374	0	874	0	1,800	1,800	.....	.....	"	"	1	1	1,000	.....	.....	14
468	468	0	0	refuse	.....	.....	"	"	1	.....	.....	.....	.....	12
143	*	0	no	.....	.....	no	"	.....	*	.....	.....	.....	18
131	*	0	"	.....	.....	"	"	.....	.....	.....	.....	.....	13
747	747	0	0	1,100	250	.....	yes	"	1	1	3,000	1	15 00	18
280	0	0	no	.....	.....	no	"	.....	3 50	.....	.....	.....	15
163	163	0	0	1,100	350	.....	"	"	.....	.....	.....	.....	.....	15
129	*	0	no	.....	.....	"	"	.....	.....	.....	.....	.....	13
278	25	0	"	.....	.....	"	"	.....	3 00	.....	.....	.....	13
374	100	150	1,800	.....	.....	"	"	1	+	.....	.....	.....	12
343	no	0	"	.....	.....	"	"	1	*	.....	.....	.....	14
546	266	260	0	1,400	1,300	.....	"	"	1	1	3,000	1	15 00	13
448	0	0	no	.....	.....	"	banjo	1	6 50	3,000	1	15 00	13
420	0	0	"	.....	.....	"	none	1	4 00	.....	.....	.....	12
312	0	0	"	.....	.....	"	"	.....	3 00	.....	.....	.....	14
156	0	0	"	.....	.....	"	"	.....	3 00	.....	.....	.....	11
374	*	0	"	.....	.....	"	"	.....	*	.....	.....	.....	13
468	150	140	"	.....	.....	"	"	1	5 00	.....	.....	.....	13
6	*	0	"	.....	.....	"	"	.....	.....	.....	.....	.....	13
312	*	0	"	.....	.....	"	"	.....	*	.....	.....	.....	15
431	431	0	0	"	.....	8 00	"	guitar	.....	.....	.....	.....	.....	15
328	15	0	"	.....	.....	"	none	1	1	5 00	.....	.....	13
73	0	0	"	.....	.....	"	"	.....	3 50	.....	.....	.....	13
343	*	25	"	.....	.....	"	"	.....	*	.....	.....	.....	13
374	*	25	"	.....	.....	"	"	1	*	.....	.....	.....	12
104	*	0	"	.....	.....	"	"	.....	*	.....	.....	.....	13
156	*	0	"	.....	.....	"	"	.....	*	.....	.....	.....	13
448	0	0	"	.....	.....	"	"	.....	4 00	.....	.....	.....	14
420	420	0	0	"	.....	8 00	yes	"	1	.....	.....	.....	.....	13
260	0	0	"	.....	.....	no	"	.....	3 00	.....	.....	.....	13
266	0	0	"	.....	.....	"	"	1	3 50	.....	.....	.....	17
206	*	0	"	.....	.....	"	"	.....	*	200	.....	.....	15
156	*	0	"	.....	.....	"	"	.....	*	.....	.....	.....	14
374	50	60	"	.....	.....	"	"	.....	3 00	.....	.....	.....	13
815	*	0	"	.....	.....	"	"	.....	*	.....	.....	.....	13
857	*	0	"	.....	.....	"	"	2	*	.....	.....	.....	13
178	0	"	.....	.....	"	organ	1	2 50	.....	.....	.....	14

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
381			*	0	no			no	guitar	1	*				13
173			0	0	no			no	organ						20
182			0	0	no			no	none		\$3.00				16
191			*	0	no			no	organ	1	*				26
384			*	0	no			no	none	1	*				14
250			*	0	no			no	"		*				14
365			*	0	no			no	"	1	*				15
812			*	0	no			no	piano	1	*				16
78			*	0	no			no	none		*				16
312			0	0	no			no	organ						19
177			*	0	no			no	none		*				15
95			*	0	no			no	"		*				16
117			*	0	no			no	organ		*				18
500			*	0	no			no	none	1	*				13
500			0	0	no			no	"		4.00	\$600	1	\$3.00	13
381	\$40	\$381	0	0	\$800			no	"						16
762	200	762	0	0	no		\$18.00	yes	"	1					15
381	100	381	0	0	800			no	"	1					14
228			*	0	no			no	"		*				12
481	0	481	0	0	1,000	\$500		no	"	1		400	1	10.00	14
187			*	0	no			no	"		*				13
458		458	0	0	"		7.00	no	"			2,000			14
406		406	0	0	"		6.00	no	"	1					16
429			*	0	no			no	"		*				11
458			*	0	no			no	"		*				12
119			*	0	no			no	"		*				11
173			*	0	no			no	"		2.00				15
143			*	0	no			no	"		*				14
187			*	0	no			no	"		*				13
119			*	0	no			no	"		*				13
387	200	387	0	0	2,000			yes	"	1					16
626		626	0	0	800			no	"						14
300		500	0	0	no		6.00	yes	"	2					25
357	100	357	0	0	1,500			no	"	1					14
65			*	0	no			no	"		*				14
143			*	0	no			no	"		*				12
458		458	0	0	1,400	400		yes	"			2,000			11
530		530	0	\$150	no		6.50	no	"	1			2	18.00	20
119			*	0	no			no	"		*				11
671			0	0	850			no	"		†				13
372	0		0	refuse	no			no	"		3.00				12
400	200	400	0	0	"		6.00	yes	"	1		2,000	1	5.00	14
500			\$100	300	"			no	"	1					14
364	0	364	0	50	1,100			yes	"	1					13
488		488	0	0	no		5.00	no	"	1		600	1	15.00	8
458		458	0	0	no		6.50	no	"	1					14
455		455	0	0	"		8.00	no	"	1		2,000			18
543		493	50	0	1,000	250		no	"	1			1	15.00	15
104			*	0	no			no	"		*				12
357			*	0	no			no	"	1					15
78			*	0	no			no	"		*				13
130			*	0	no			no	"		*				12
405		405	0	0	no		5.00	no	"	1					15

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

TABLE NO. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No of newspapers and magazines.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
388				0	no			no	none		*				18
400	3200	3400		0	\$1,500	\$200		yes	"	1			1	\$5 00	13
451		451		0	no			"	"						15
459		300		\$100	no		\$7 00	no	"				1	5 00	15
500				25	"			"	"		\$3 50				15
499		499		100	"		4 00	"	"	1					18
499				0	"			"	"		3 00		1	6 00	19
400				0	"			"	"		3 50				14
312				0	"			"	"		3 00				13
0				0	"			"	"		*				12
708		708		0	"		8 00	yes	"	1			1	15 00	14
796		696		0	2,000	800		"	"	1					13
780	0	780		0	1,600	800		"	"	1	1				13
433	42	433		400	no		6 00	"	"	1		\$1,000			13
17				0	"			no	"		*				14
374	0	374		0	"		7 00	"	"						12
496				0	"			"	"		3 50				14
351		351		0	"		9 00	yes	"	1			1	6 00	12
65				0	"			no	"		*				12
1,144	600	544		1,000	"		15 00	yes	piano	1	1	2,000	2	15 00	15
455	0	455		200	"		7 00	"	none	1		600	1	15 00	14
455				0	"			no	"	1	4 00				14
250	50	250		0	"		4 00	no	"	1					11
400		400		0	2,000			yes	"	1	1				7
108				0	no			no	"	1		*			14
500	0	500		0	"		7 00	yes	"	1			1	6 00	14
386				100	"			no	"		3 00				11
166				0	"			"	"		*				12
596	0	596		0	"		6 00	yes	"	1			1	5 00	13
443		343		200	"		6 00	"	"	1					13
351				0	"			no	"		4 00		1	10 00	14
624		624		600	"		7 00	yes	either	1					13
473				0	1,100	730		no	accord		†				11
364		364		0	1,600			yes	none	1		2,000	1	5 00	13
545		545		500	no		8 00	no	"	1					15
468				25	"			"	violin		3 50				14
357		357		0	1,000	500		"	none						12
351				0	no			"	"	2	4 00				17
566				0	"			"	"	2	†				14
523				0	"			"	"		4 00				14
800				100	"			"	"		3 50				14
596		596		0	"		7 00	yes	"	1	1				14
366		736		400	800		8 00	"	"	1	1	2,000	1	16 00	12
800				0	no			no	"		†				14
456				0	"			"	"		4 00		1	4 00	13
324	0			0	"			"	"		4 00				14
373				50	"			"	"	1	3 50				13
104		104		0	"		5 00	yes	"						16
400				0	"			no	"	1	†				13
152				0	"			"	"		*				13
577	0	577		0	"		6 00	yes	"	1					13
800				0	"			no	"		3 50	500	1	4 00	13
429	0	429		0	1,000			"	"	1			1	5 00	16

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 9.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country)	Nativity of parents.	Married or single.	No. of children in family.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Cabinet-maker..	32	Germany..	Germany..	m	4	5	16	1½	11	26	no work	\$1 75 d
"	31	"	"	m	3	3	17	2m	9	73	"	1 75 "
Machine hand..	26	"	"	s	1	0	9	9	12	10	"	10 80 w
Cabinet-maker..	35	"	"	m	3	3	18	8	11	26	no work	1 50 d
"	26	"	"	m	1	1	9	1	10	33	"	9 75 w
"	40	"	"	m	4	5	24	2m	10	52	"	1 75 d
Carver.....	31	Michigan..	U. S.....	s	1	1	7	7	10	53	laid off	2 50 "
Cabinet-maker..	20	"	Germany..	s	1	0	5	5	11	26	no work	1 75 "
"	15	"	"	s	1	0	1	1	12	1	"	3 50 w
"	19	"	"	s	1	0	2½	5w	12	1	"	1 50 d
"	28	Austria...	Austria...	s	1	0	12	3	12	1	"	2 00 "
"	31	Germany..	Germany..	m	1	3	14	17m	10	52	no work	1 75 "
"	31	"	"	m	1	3	12	2	11½	19	"	1 75 "
Machine hand..	18	"	"	s	1	0	1	1	12	1	"	1 00 "
"	18	"	"	s	1	0	4	4	8	104	no work	1 00 "
Foreman.....	26	"	"	m	1	2	6	6	12	1	"	2 50 "
Machine hand..	24	Canada...	Canada...	s	1	0	6	8m	11	26	sick and no wrk	2 00 "
"	31	Germany..	Germany..	m	1	1	8½	2½	12	1	"	2 00 "
"	45	Canada...	France...	m	1	9	17	8w	7½	117	no work	1 75 "
"	28	Germany..	Germany..	m	4	5	9	8m	10	52	"	1 50 "
"	31	"	"	s	1	0	7	3	11	26	"	2 00 "
"	32	"	"	s	1	0	4	9	11	26	accident	1 50 "
"	31	"	"	s	1	0	2½	1½	11	26	no work	1 25 "
"	23	"	"	s	1	0	6	6	12	1	"	1 50 "
"	31	Michigan..	"	s	1	0	6	2	9	73	no work	1 75 "
"	28	Russia...	Russia...	m	1	2	12	7w	6	156	"	1 50 "
Turner.....	19	Canada...	Canada...	s	1	0	5	1½	11	26	"	1 75 "
"	27	Michigan..	U. S.....	m	1	1	3	8m	10	53	"	2 00 "
Laborer.....	15	"	Germany..	s	1	0	2	2	10	52	"	75 "
Turner.....	20	Germany..	"	s	1	0	1	½	8	104	"	1 00 "
"	31	Brazil...	"	s	1	0	1½	1	12	1	"	2 00 "
"	32	Canada...	France...	m	1	7	16	1	10½	29	no work	2 25 "
"	46	Germany..	Germany..	m	1	2	30	1	11	26	"	2 00 "
"	47	Canada...	Canada...	wr	4	4	30	2	11	26	shut down	2 25 "
Machine hand..	36	Germany..	Germany..	m	1	4	2	2	11	26	no work	1 25 "
"	30	Canada...	Canada...	m	4	4	20	2	9½	55	accidn't & no wrk	1 75 "
"	26	Germany..	Germany..	m	1	2	2	2	11	26	no work	1 50 "
"	27	"	"	m	1	3	12	3	12	1	"	1 50 "
ARSTZ, MEYERS & KIRCHBERG.												
Cabinet-maker..	19	Michigan..	"	s	1	0	3	3	12	1	"	8 50 w
Finisher.....	18	"	"	s	1	0	2m	2m	12	1	"	4 00 "
Cabinet-maker..	17	"	"	s	1	0	1½	1½	6	156	sickn's & no wrk	4 50 "
Machine hand..	16	Germany..	"	s	1	0	1	1	12	1	"	2 75 "
"	16	Michigan..	"	s	1	0	½	1	12	1	"	3 50 "
Finisher.....	17	"	"	s	1	0	3	3	12	1	"	1 00 d
"	15	"	"	s	1	0	2m	2m	8	104	no work	2 50 w
Cabinet-maker..	17	Germany..	"	s	1	0	1	1	11½	19	shut down	1 00 d
Finisher.....	16	Michigan..	"	s	1	0	1	1	11	26	laid off	4 00 w
Machine hand..	16	Italy.....	Italy.....	s	1	0	1m	1m	6	156	no work	4 50 "
Cabinet-maker..	16	Germany..	Germany..	s	1	0	1	1	12	1	"	3 00 "
Foreman.....	31	New York..	"	m	1	2	17	3	12	1	"	2 75 d
Machine hand..	30	Germany..	"	m	1	3	7	7	12	1	"	1 75 "
Laborer.....	26	"	"	m	1	2	16	3	11½	13	sickness	3 00 w
Cabinet-maker..	26	Michigan..	"	m	1	5	10	7	12	1	"	2 50 d

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$500	\$35	\$500	0	0	\$1,500	\$1,000	—	yes	none	1	—	—	—	—	1	\$5 00	14
408	100	408	0	0	800	600	—	no	"	—	—	—	—	\$300	—	—	14
545	—	—	\$100	0	no	—	—	no	"	—	1	—	\$4 00	—	—	—	13
423	500	423	0	0	1,500	700	—	yes	"	—	—	—	—	—	1	5 00	17
423	0	394	25	0	no	—	\$2 00	—	"	—	1	—	—	—	—	5 00	15
455	0	455	0	0	"	—	7 50	"	"	1	—	—	—	—	1	5 00	15
850	—	—	0	0	"	—	—	no	flute	1	—	—	4 50	—	—	—	14
800	—	—	*	0	"	—	—	"	none	—	1	—	—	—	—	—	18
182	—	—	*	0	"	—	—	"	"	—	—	—	*	—	—	—	12
468	—	—	*	0	"	—	—	"	violin	1	1	—	—	—	—	—	18
424	0	—	0	0	2,000	1,000	—	"	none	1	1	—	3 50	1,000	1	5 00	15
455	—	455	0	0	900	850	—	yes	"	1	1	—	—	250	—	—	17
512	40	512	0	0	500	—	3 00	no	"	—	—	—	—	—	—	—	12
812	—	—	*	0	no	—	—	"	"	1	—	—	*	—	—	—	14
208	—	—	—	0	—	—	—	"	"	—	—	—	—	—	—	—	14
730	—	430	300	0	1,200	200	—	yes	banjo	—	1	—	—	2,000	—	—	12
573	—	—	200	0	no	—	—	no	none	1	1	—	4 00	—	—	—	15
624	—	624	0	0	"	—	5 00	"	"	1	—	—	—	—	1	5 00	7
341	—	341	0	0	1,500	—	—	yes	"	1	—	—	—	—	—	—	10
390	0	390	0	0	1,500	440	—	"	"	—	—	—	—	—	1	5 00	15
572	—	—	0	\$25	no	—	—	no	accord	—	—	—	4 00	—	—	—	14
429	—	—	0	0	1,250	—	—	"	"	—	—	—	2 50	—	—	—	18
357	—	—	0	0	no	—	—	"	none	1	—	—	3 50	—	1	5 00	16
468	—	—	200	0	"	—	—	"	"	—	—	—	3 00	—	—	—	16
409	—	—	0	0	"	—	—	"	"	1	1	—	†	—	—	—	13
234	0	234	0	0	300	280	—	yes	violin	1	1	—	4 50	—	—	—	14
500	—	—	0	0	no	—	—	no	none	1	—	—	—	—	—	—	14
530	—	430	100	180	"	—	7 00	yes	"	—	—	—	—	2,000	1	10 00	14
195	—	—	*	0	"	—	—	no	"	1	—	—	*	—	—	—	13
208	—	—	—	0	"	—	—	"	"	—	—	—	—	—	—	—	15
624	—	—	155	80	"	—	—	"	"	—	—	—	4 00	—	—	—	14
614	40	614	0	0	"	—	—	yes	"	1	1	—	—	—	—	—	14
822	150	372	250	0	1,400	400	—	"	guitar	1	—	—	—	1,000	—	—	14
643	—	643	0	0	no	—	10 00	"	violin	1	—	—	—	—	—	—	16
357	0	357	0	0	1,000	—	—	"	"	1	—	—	—	—	1	5 00	14
432	—	432	0	0	no	—	7 00	"	"	—	—	—	—	—	1	6 00	10
420	—	420	0	0	400	—	—	no	"	—	—	—	—	2,000	—	—	16
468	0	468	0	0	no	—	3 00	"	"	1	—	—	—	—	—	—	12
442	—	—	0	0	"	—	—	"	"	—	1	1	3 75	—	—	—	14
208	—	—	*	0	"	—	—	"	"	1	—	—	*	—	—	—	13
117	—	—	*	0	"	—	—	"	"	—	—	—	*	—	—	—	15
143	—	—	*	0	"	—	—	"	"	—	—	—	*	—	—	—	13
182	—	—	*	0	"	—	—	"	"	—	1	—	*	—	—	—	15
312	—	—	*	0	"	—	—	"	"	—	—	—	*	—	—	—	14
87	—	—	*	0	"	—	—	"	"	—	—	—	*	—	—	—	13
222	—	—	*	0	"	—	—	"	"	—	—	—	*	—	—	—	14
191	—	—	*	0	"	—	—	"	"	—	—	—	*	—	—	—	14
117	—	—	*	0	"	—	—	"	"	—	—	—	*	—	—	—	8
156	—	—	*	0	"	—	—	"	"	—	—	—	*	—	—	—	13
353	—	353	0	400	"	—	12 00	yes	guitar	1	1	1	—	—	1	5 00	13
546	15	346	200	0	900	800	—	"	none	—	—	—	—	—	—	—	14
399	0	399	100	0	350	275	3 00	no	"	—	—	—	—	—	—	—	10
730	—	730	0	0	1,200	—	—	yes	piano	—	1	—	—	—	—	—	14

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Machine hand...	26	Germany	Germany	s			0	6	6	12			\$11 00 w
Cabinet-maker...	26	"	"	s			0	6	6	12			10 00 d
Carpenter...	19	"	"	s			0	1	1	12			1 00 d
Machine hand...	20	Michigan	U. S.	s			0	6	6	12			8 00 w
Finisher...	16	"	Germany	s			0	2m	2m	12			8 00 w
Machine hand...	22	Germany	"	s			0	5	5	12			10 00 "
Turner...	22	Poland	Poland	s			0	5	5	12			6 00 "
Engineer...	43	Germany	Germany	m			4	8	8	12			3 00 d
Cabinet-maker...	31	Michigan	"	s			0	5	5	12			2 00 w
"	15	"	"	s			0	1	1	12			2 50 w
"	17	"	"	s			0	8m	8m	8	104	no work	5 00 "
Machine hand...	36	Germany	"	s			0	8m	7m	10	58	sickness	1 00 d
"	53	Michigan	U. S.	m			8	26	18	12			3 00 "
"	28	"	Germany	m			1	7	6	12			3 00 "
Cabinet-maker...	28	Belgium	Belgium	m			1	18	2m	11	26	no work	1 75 "
Machine hand...	26	Michigan	Germany	m			2	8	6	12			1 85 "
"	38	Germany	"	m			2	5	2	12			1 50 "
Cabinet-maker...	28	Belgium	Belgium	m			1	14	8	5		first w'rk in U.S.	1 75 "
"	23	Michigan	Germany	s			0	8	8	12			1 25 "
"	23	Germany	"	m			2	11	7	11	26	involving	17 50 w
Finisher...	31	Michigan	"	s			0	6	1	10	53	no work	1 50 d
"	40	Germany	"	m			6	6	6	12			1 75 "
"	19	Michigan	"	s			0	3	2	12	120	no work	13 00 w
"	23	Germany	"	s			2	3	3	12			1 25 d
"	21	"	"	s			2	3	3	12			1 80 "
"	24	"	"	s			1	6	4	12			1 75 "
"	31	Michigan	"	m			1	10	2	9	78	no work	9 00 w
"	19	New York	"	s			0	4	1w	9	78	"	8 00 "
"	26	Canada	England	s			0	1	1	10	58	"	1 40 d
"	19	Michigan	Germany	s			0	4	1	12			8 50 w
Machine hand...	30	Germany	"	s			0	3	3	12			1 25 d
Finisher...	42	"	"	m	5	3	5	25	3½	12			1 75 "
Cabinet-maker...	27	Belgium	Belgium	m	0	0	1	6	2m	12			1 75 "
Finisher...	27	New York	Germany	m	0	0	1	2	2	10	52	involving	12 80 w
C. D. WIDMAN & Co.													
Polisher...	15	Michigan	"	s			0	7m	7m	12			5 00 "
Machine hand...	14	Germany	"	s			0	1½	1½	12			3 00 "
Finisher...	18	"	"	s			0	2w	2w	12		first work	2 00 "
Carver...	17	"	"	s			0	1½	1½	12			7 50 "
"	20	"	"	m	4	1	5	17	5w	10	52	no work	2 00 d
Polisher...	16	"	"	s			0	4	2	11	26	"	9 50 w
Filler...	18	Poland	Poland	s			0	1	1	10½	26	"	4 50 "
Miterer...	17	Michigan	Germany	s			0	1	1	12			6 00 "
Gilder...	20	Germany	"	s			0	8	1m	6	156	no work	7 50 "
Machine hand...	14	"	"	s			0	1½	1½	12			8 50 "
Laborer...	14	"	"	s			0	11m	11m	12			2 00 "
Picture framer...	14	Italy	Italy	s			0	11m	11m	12			2 50 "
Joiner...	16	Michigan	Germany	s			0	2w	2w	10	62	no work	3 50 "
Finisher...	15	Germany	"	s			0	½	½	6		first work	2 25 "
"	23	"	"	s			0	6	1½	6	156	no work	9 00 "
Machine hand...	15	Michigan	"	s			0	10m	10m	10		first work	2 50 "
Cabinet-maker...	27	Canada	Canada	m	0	0	1	9	5m	9	78	no work	10 00 "
Turner...	16	Michigan	Germany	s			0	2	4m	12			5 00 "
Machine hand...	28	"	"	s			0	6	5	12			10 00 "

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$572	0		\$50	\$75	no			no	accord'n violin		\$3 50				16
520	0		50	0	"			"	none	1	3 50				15
312	0		0	0	"			"	"		3 50				8
418	0		* 0	0	"			"	"		3 50				12
156				0	"			"	"						12
520	0		* 0	45	"			"	"	1	2 00				11
312	0		* 0	0	"			"	"	1					12
784	\$16	\$764	* 0	0	\$2,000			yes	"	1	*	\$500	1	\$4 00	16
624				0	no			no	"	1	*				16
130			* 0	0	"			"	"		*				14
173			*	0	"			"	"	1	*				13
260	0		0	0	"			"	"	1	3 00				14
938		938	0	0	no			yes	piano	1	1				15
624		624	0	0	"			no	guitar	1	1				16
500	0	500	0	0	"			no	none	1	1				13
577		577	0	0	1,500	\$825		yes	"	1					14
468	0	468	0	0	1,200			"	"	1					16
273	0	273	0	0	no			no	"	1	3 00	2,000			12
390			0	0	"			"	"	1	3 00				13
838		788	50	0	600			"	base viol	1	1		1	5 00	12
390			0	0	no			"	none		3 50				15
546	75	546	0	0	"			3 50	"	1	1				15
394			65	0	"			"	"	1	1	4 00	1	5 00	12
390			0	0	"			"	"		3 50				13
468			0	0	400			"	"	1	3 50				15
546		446	100	0	1,000	500		"	"	1	1				17
361		361	0	0	no			"	"	1					12
312			0	0	"			"	"		3 50				12
364			0	0	"			"	"		3 50				14
442			* 0	0	"			"	"		*				13
390			0	0	"			"	"		3 00				15
668	0	668	0	0	"			"	"	1			1	5 00	16
546	0	546	0	0	"			"	"						12
542		544	0	0	"			yes	g't'r, b'jo	1	1				17
280			*	0	"			no	none		*				14
104			*	0	"			"	"		*				13
4			*	0	"			"	"	1					16
390			*	0	"			"	"	1	*				15
520		520	0	0	1,200			yes	organ	1					13
453			*	0	no			no	none		*				12
206			* 0	0	"			"	"	1					14
312			* 0	0	"			"	"	1	*	200			16
195			0	50	"			"	"	1	3 50				16
182			0	0	"			"	"		3 00				13
104			*	0	"			"	"		*				13
130			*	0	"			"	"		*				12
152			*	0	"			"	"		*				12
58			*	0	"			"	"		*				14
224			0	0	"			"	"		3 50				15
108			*	0	"			"	"		*				14
390		390	* 0	0	"			"	"	1		1,000			12
312			*	0	"			"	"		*				14
520			0	0	"			"	"		4 00				14

* Gives wages to parents and lives at home.

LABOR AND INDUSTRIAL STATISTICS.

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

No. of days of lost time during the year.	Cause for loss of time.	Wages received.	
		\$	
.....	.....	\$7 50	W
.....	.....	3 00	"
.....	.....	3 00	"
.....	.....	7 00	"
52	Injured & no work	3 50	"
.....	.....	3 00	"
75	no work	5 50	"
.....	first work	1 50	"
.....	.....	5 50	"
.....	.....	7 00	"
.....	.....	13 00	"
.....	.....	12 15	"
.....	.....	10 00	"
.....	.....	1 25	d
156	no work	1 75	W
.....	.....	3 75	"
.....	.....	3 50	"
.....	.....	3 25	"
.....	.....	3 00	"
25	no work	1 50	"
.....	.....	3 75	"
.....	first work	1 50	"
.....	.....	1 75	"
25	no work	2 00	"
.....	.....	3 00	"
75	no work	4 00	"
53	sick and no work	1 75	"
.....	.....	3 75	"
25	no work	2 00	d
25	accident	1 50	"
.....	.....	3 00	W
25	not answered	3 00	"
25	no work	3 00	"
.....	.....	1 50	d
.....	.....	5 00	W
.....	.....	3 00	"
.....	.....	2 00	"
.....	.....	2 00	d
25	no work	3 00	W
75	"	3 00	"
25	"	3 50	"
.....	not in U. S.	3 00	d
.....	.....	3 50	W
.....	.....	3 00	"
.....	not in U. S.	3 00	d
25	no work	2 00	"
.....	.....	2 00	W
.....	.....	3 00	"
.....	.....	3 00	"
.....	.....	3 00	"
75	no work	2 00	"
.....	.....	15 00	"

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$390		\$390	0	0	no		\$8 00	yes	none	1					18
104			*	0	0			no							18
416	\$80	416	0	0	\$1,500	\$700		yes	violin						20
464	0	464	0	0	no		5 00	no	none						7
232			0	0	no			no	guitar	1	\$5 00		1	\$5 00	16
312			0	\$150	"			"	none		8 00				15
214			*	0	"			"	"		*				12
39			*	0	"			"	"		*				18
236			*	0	"			"	"		*				18
364			0	0	"			"	"		8 50				14
															18
326		536	\$400	25	1,300			yes	"	1	2	\$2,000	1	5 00	11
632		632	0	0	1,200	200		no	"	2		2,000	2	15 00	12
530			100	0	no			"	"		3 50				14
300			0	0	no			"	"	1	1	8 50			14
45			*	0	0			"	"						14
195			*	0	"			"	"		*				16
152			*	0	"			"	"		*				18
117			*	0	"			"	guitar		*				12
104			*	0	"			"	none		*				18
66			*	0	"			"	"		*				18
195			*	0	"			"	"		*				12
65			*	0	"			"	"		*				12
31			*	0	"			"	"		*				12
96			*	0	"			"	"		*				13
104			*	0	"			"	"		*				15
286			0	0	"			"	piano		0				16
68			*	0	"			"	none		*				12
119			*	0	"			"	"		*				19
572		572	0	0	"		10 00	"	"	1	1				12
491	0	491	0	0	1,000	500		yes	"	1		400	1	10 00	14
156			*	0	no			no	"	1		*			14
331	40	331	0	0	800			"	"						15
331			0	0	no			"	"		8 00				14
468	10	520	0	0	"		10 00	"	"		*		1	5 00	13
230			*	0	"			"	"		*				14
156			*	15	"			"	guitar	1	3	*			15
104			*	0	"			"	none		*				15
624	0	599	25	0	"		8 00	yes	"	1		2,000	1	5 00	18
143			*	0	"			no	"	1		*			14
78			*	0	"			"	guitar		1	*			14
119			0	0	"			"	none			2 00			14
312	400		0	0	"			"	"		3 50				12
120			0	0	"			"	"		*				14
156			*	0	"			"	"		*				13
936	200	936	0	0	2,000			yes	"	1	1	2,700	2	10 00	15
416	0		0	0	no			no	"	1		4 00			12
96			*	0	"			"	"						14
156			0	0	"			"	guitar		2 50				18
156			*	0	"			"	"		*				15
156			*	0	"			"	violin	1		*			15
156			*	0	"			"	"	1		*			15
104			*	0	"			"	"	1		*			13
506		506	0	0	"		10 00	yes	"	2		2,000	1	5 00	14

* Gives wages to parents and lives at home.

TABLE No. 9.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Upholsterer.....	32	Germany..	Germany..		2						\$11 00
Finisher.....	30	Michigan..	"		2						3 00
Finisher.....	31	"	"		1				104	no work	3 00
Cabinet-maker..	31	"	"		1				53	no work	3 00
Cabinet-maker..	43	Belgium..	Belgium..		2				53	no work	3 00
Finisher.....	17	Michigan..	Germany..		0						4 00
Finisher.....	59	New York..	"		1				104	no work	1 25
Upholsterer.....	39	Michigan..	"		5						10 00
Finisher.....	19	Germany..	"		0						6 00
Finisher.....	35	"	"		4						10 00
Upholsterer.....	17	England..	England..		0						3 00
Finisher.....	16	Illinois..	"		0						3 50
Finisher.....	19	Canada..	Scotland..		0				53	no work	5 00
Seamstress.....	30	Michigan..	Germany..		1				53		5 00
Upholsterer.....	38	Ohio.....	"		0						6 00
Finisher.....	17	Michigan..	"		0				30	not answered	3 50
Seamstress.....	25	"	"		0						5 00
Seamstress.....	26	Canada..	U. S.....		1						4 50
WM. WRIGHT											
Finisher.....					1						3 00
Cabinet-maker..					7				53	no work	2 00
"					0				150	"	2 00
"					6						2 00
"					1						2 00
"					2						2 00
Wood worker..					1						2 00
Finisher.....					1				52	no work	2 00
Finisher.....					0				30	"	2 00
Cabinet-maker..					2						3 50
"					4						2 50
"					3				18	no work	3 00
Finisher.....					4				17	"	2 00
Cabinet-maker..					2						2 00
"					2						2 10
"					7						2 00
"					3						2 00
Carver.....					3				104	no work	2 50
Cabinet-maker..					2				104	"	2 00
"					0						2 10
Finisher.....					3						2 00
Carver.....					0						7 50
"					1						2 50
Machine hand..					0						12 00
Cabinet-maker..					4						2 00
"					2						2 00
"					0				53	no work	2 00
Machine hand..					0				180	"	2 00
Cabinet-maker..					5						2 50
Foreman.....					4						3 00
Finisher.....	33	Michigan..	U. S.....		0						3 25
Cabinet-maker..	47	Austria..	Austria..		2						14 00
"	37	France..	France..		4						2 10
"	34	Belgium..	Belgium..		4						2 10

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$572			0	\$50	no			no	none			\$4 00					15
156			* 0	0	no			no	guitar			*					16
277			0	0	no			no	none			4 00					15
624		\$624	0	0	no		\$3 00	yes	no	1					1	\$5 00	13
530	\$136	530	0	0	no		10 00	no	no								13
208			* 0	0	no			no	no		*						14
230		260	0	0	no		24 00	yes	piano	1		\$2,000					15
530		530	0	0	no			no	none	1		3,000					15
812			* 0	0	no			no	no		*						15
530		530	0	0	\$400			yes	no			600	1	5 00			13
156			* 0	0	no			no	harp		*						16
182			* 0	0	no			no	none	1				204			13
217			0	0	no			no	no	1	8 00						13
217		217	0	0	no		5 00	yes	no	1							18
312		212	\$100	200	no		2 00	no	no		1						13
159			*	0	no			no	no		*						16
260			0	0	no			no	no	1	8 00						16
838		838	0	0	no		7 00	yes	no	1							14
			0	0	no			yes	no								15
624		524	100	50	no		8 25	no	no	1		1					12
770		770	0	0	1,400	\$300		no	no	1					1	5 00	14
312	100		0	0	no			no	no		4 00						15
624	50	624	0	0	1,200	200		no	no	1	2	1			1	6 00	16
624	260	624	0	0	1,000	350		yes	no		1		500		1	5 00	14
624		624	0	0	600	200		no	no		1						14
624		624	0	0	no		10 00	no	no						2	10 00	13
530		530	0	0	no		7 00	no	guitar	1	1		2,000		1	5 00	13
546			100	100	no			no	none			8 00	200		1	5 00	13
868	100	808	0	0	no		9 00	no	none						1	5 00	14
686		686	0	0	no		8 50	yes	zither	1					1	5 00	16
686	25	628	0	0	no		7 00	no	none								16
568	10	568	0	0	no		5 00	yes	no	1			2,000		1	5 00	16
416	50	416	0	0	1,200	800		no	violin	2			1,000		2	10 00	17
656	200	606	50	0	1,200	800		no	none	1			2,000		1	5 00	16
724	25	724	0	0	1,500	750		yes	no	1	1						14
624	20	624	0	0	no		5 00	no	no		1	1					16
530		530	0	0	1,500	500		no	no		1	1		500			13
416	200	416	0	0	no		13 00	no	no		1						14
656	10	656	0	0	no		10 00	no	no		1			400	1	5 00	11
624		424	200	300	no		10 00	no	organ	2		1	1,250		1	5 00	14
390			0	0	no			no	banjo			4 00					14
780		580	200	0	no		15 00	no	p. & vio	1							16
624			0	0	no			no	none			8 50	200		1	10 00	14
624		574	50	0	no		6 00	yes	no	1							16
624	15	624	0	0	800	100	10 00	no	no	1				2,000			15
530			0	100	no			no	no	1		4 00					14
364			0	0	no			no	violin	1		4 00					13
702	0	732	0	refuse	refuse			yes	none	1	1						10
986		736	200	0	2,800	1,900		yes	organ	1	2	1	2,000				16
702			*	C	no			no	piano	1		*					14
728	50	728	0	0	1,800	1,100		yes	no	1	1		1,150	1	5 00		18
655	400	555	200	0	no		8 00	no	no	1	1						16
655	0	655	0	0	1,100	400		yes	no	1	2		2,000	1	5 00		13

* Gives wages to parents and lives at home.

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Cause for loss of time.	Wages received.
DENIER FURNITURE CO.					
Machine hand...	24	Michigan..	Germany	.....	\$2 00 d
Cabinet-maker...	32	Canada...	"	.....	1 50 "
Carver, foreman...	26	Michigan..	"	.....	15 00 w
Cabinet-maker...	35	Germany..	"	no work	1 70 d
Carver.....	18	Michigan..	"	"	9 75 w
".....	19	Illinois...	England..	"	6 00 "
Machine hand...	31	Canada...	Canada..	.....	1 75 d
".....	14	Michigan..	Germany	wrk in U. S.	2 00 w
Cabinet-maker...	27	Germany..	"	.....	1 75 d
Machine hand...	29	Michigan..	"	no work	1 50 "
Laborer.....	14	"	"	lost w'rk	1 75 w
Machine hand...	24	Germany..	"	.....	1 75 d
".....	20	"	"	.....	1 50 "
Cabinet-maker...	23	"	"	.....	7 50 w
".....	20	"	"	no work	1 50 d
Machine hand...	27	Michigan..	Scotland..	"	1 75 "
Cabinet-maker...	39	Germany..	Germany	.....	1 70 "
Machine hand...	23	Michigan..	"	.....	9 00 w
Cabinet-maker...	23	Germany..	"	.....	1 75 d
Machine hand...	18	Michigan..	"	no work	7 50 w
Cabinet-maker...	27	Germany..	"	.....	1 50 d
Foreman cab.w'k...	20	"	"	.....	15 00 w
Machine hand...	25	Canada...	Canada..	accident	1 50 d
Cabinet-maker...	23	Germany..	Germany	.....	1 70 "
".....	42	"	"	.....	9 00 w
Machine hand...	32	"	"	.....	1 25 d
Cabinet-maker...	31	"	"	st in U. S.	1 40 "
".....	33	"	"	no work	7 50 w
Carver.....	15	Michigan..	"	.....	2 00 "
Cabinet-maker...	37	Germany..	"	.....	7 50 "
Laborer.....	14	"	"	.....	3 00 "
Carver.....	48	England..	England..	no work	15 00 "
Cabinet-maker...	14	Germany..	Germany	.....	3 25 "
HUNT, CRAINE & CO.					
Chair-weaver...	18	Michigan..	"	no work	5 50 "
".....	20	"	"	.....	6 00 "
".....	23	Germany..	"	.....	6 00 "
".....	21	Michigan..	"	.....	6 00 "
Machine hand...	31	Germany..	"	.....	2 00 d
Foreman.....	26	Ohio.....	U. S.....	.....	3 25 "
Finisher.....	21	Germany..	Germany	.....	1 25 "
Chair-maker...	21	"	"	.....	1 50 "
Turner.....	23	Ohio.....	U. S.....	no work	18 50 w
Machine hand...	22	"	Germany	.....	9 00 "
Chair-maker...	25	Germany..	"	.....	1 50 d
".....	30	Scotland..	Scotland..	.....	1 50 "
Finisher.....	19	Germany..	Germany	no work	3 00 w
Chair-maker...	50	Mass.....	U. S.....	"	1 75 "
Turner.....	30	Canada...	England..	.....	14 00 w
".....	19	Germany..	Germany	.....	7 00 "
".....	18	"	"	.....	7 50 "
".....	17	Canada...	Canada..	.....	3 00 "
Finisher.....	18	Germany..	Germany	.....	4 50 "

TABLE No. 9.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
624			\$100	\$100	\$1,400	\$200		no	none				\$3 00				13
468		\$468	0	0	no		\$5 50	yes	horn								16
780			*	0	no			no	none	1			*				14
486	\$800	486	0	0	1,000			yes	"	1	1				1	\$4 00	15
444			0	15	no			no	"	1			5 00	\$250			14
156			0	0	"			"	"				8 00				17
546	0		0	0	"			"	"				7 00				14
8			*	0	"			"	"				*				14
546	5	546	0	80	"		4 50	yes	cl'ri'net	1							14
360		360	0	0	1,500			yes	organ								14
15			*	0	no			no	none								13
546	0			0	"			"	"				*				18
468			*100	100	"			"	"		1		3 50		1	5 00	16
360	0	360	0	0	"		3 50	yes	"	1							15
429	7	429	0	0	"		3 50	"	"	1					1	5 00	14
455			50	0	15			no	"		1		4 00		1		18
530	0	530	0	0	1,050	500		yes	no								16
468			*	0	no			no	guitar	1			*		1	5 00	14
546		546	0	0	"		10 50	yes	none				*				10
325			*	0	"			no	none				*				13
468	0		0	0	"			"	"				8 00				15
780	28	680	200	0	1,800	900		yes	"	1	1				1	15 00	14
370	0	370	0	0	no		7 00	no	violin	1	1						16
580	100	580	0	0	no		6 00	no	none	1	1				1	5 00	13
468	900	468	0	180	1,800			yes	zither		1			900	1	5 00	15
360	100	360	0	0	no		5 00	no	none	1		1					14
273	0		0	0	"			no	violin	1			8 00				16
195		195	0	0	1,200	450		yes	none		1	1	*				15
104			*	0	"			no	"				*				13
360	0	360	0	0	"		6 00	yes	"		1						14
87			*	0	"			no	"				*				13
705		700	0	0	"		11 00	yes	"	1			*	500			15
169			*	0	"			no	"				*				13
262			*	0	"			"	"	1	1		*				12
312			0	0	"			"	"	1	1		*				12
312			80	0	"			"	"	1	2		†				14
312			50	0	"			"	"	1	1		3 00				13
624			0	0	"		15 00	"	"	1	1		4 50				14
702		702	0	25	"			yes	violin	1	1	1					14
360			0	100	"			no	none	1	1	1	†		1	5 00	14
468		418	50	0	"		10 00	"	accord						1	8 00	13
643			0	0	"			"	none				8 00				13
468			100	300	"			"	guitar				2 75				17
468			25	0	"			"	none	1	1		5 00	8,000	1	15 00	14
468		468	0	0	4,000	900		"	organ	1	1	1					20
39			*	0	no			"	none				*				13
523		523	0	500	1,600	500		yes	"	1				2,000			8
728	100	728	0	80	no		10 00	"	violin	1			*	2,000	1	5 00	17
364			*	0	"			no	none				*	186			12
360			0	0	"			"	"				3 00				14
416			15	10	"			"	"				2 00				13
234			0	0	"			"	"								13

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	Nation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Finisher.....	19	Germany..	Germany..	s	2		B	2m	8	284	no work	8 00 w
Engineer.....	41	Mass.	Ireland..	m	2			3	12			2 00 d
Finisher.....	21	Germany..	Germany..	s	2			1	12			1 25 w
Ornamenter.....	42	"	"	m	4			4	12			18 20 w
Laborer.....	39	"	"	m	4			2	10	52	no work	1 25 d
Chair-maker.....	16	"	"	s	2			4	12			4 50 w
".....	23	"	"	m	2			1	12			1 75 d
Finisher.....	14	"	"	s	2		%	1	8		first work	3 00 w
Machine hand.....	33	New York	"	m	3			1	12			8 40 "
A. A. MAYNARD.												
Machine hand.....	21	Germany..	"	s	0			7	10½	39	shut down	10 00 "
".....	23	Michigan..	"	m	0			8	10	52	"	8 00 "
Turner.....	47	Ohio	"	s	2			8	10½	39	no work	1 50 d
Finisher.....	18	Germany..	"	s	2			8	10	52	"	2 50 w
Mach. foreman.....	25	Michigan..	"	s	2			9	11	25	shut down	8 00 d
Machine hand.....	26	New York	U. S.....	m	2			8	10	52	"	1 50 "
Finisher.....	19	Germany..	Germany..	s	2			4	10½	39	"	8 00 w
Cabinet-maker.....	28	"	"	m	2			5	10	51	"	7 50 "
".....	32	"	"	s	2			14m	10	52	no work	10 00 "
Machine hand.....	15	"	"	s	2		n	2m	8	155	"	1 75 "
".....	18	"	"	s	2			1	10½	39	shut down	8 00 "
Foreman, fin.....	41	Canada..	Scotland..	m	7			4	10	52	"	9 00 "
Machine hand.....	23	Michigan..	Germany..	s	2			5	8	104	no work	1 50 d
".....	20	"	Scotland..	s	2			8m	11	26	"	1 00 "
Finisher.....	17	"	Canada..	s	2			4	12			8 00 w
Machine hand.....	16	"	Germany..	s	2			1w	12			2 00 "
Machine hand.....	19	"	"	s	2			8	10	52	no work	5 00 "
Teamster.....	23	Germany..	"	s	2			2m	8	104	"	10 00 "
Cabinet-maker.....	27	Michigan..	U. S.....	s	2			3	10	52	"	9 00 "
Finisher.....	14	Germany..	Germany..	s	2			2m	10	52	"	1 25 "
".....	20	"	"	s	2			1m	10	52	"	1 25 d
Machine hand.....	14	Michigan..	"	s	2			1½	10½	39	shut down	1 80 w
MICHIGAN CHAIR & FURNITURE CO.												
Packer.....	13	Germany..	Germany..	s	2		%	1	8		first work	2 00 "
Finisher.....	16	"	"	s	2		m	1m	11		not in U. S.	3 25 "
".....	15	Canada..	Canada..	s	2		m	4m	12			8 00 "
Foreman finisher.....	24	Germany..	Germany..	s	2			1	12			15 00 "
Chair-maker.....	16	Michigan..	"	s	2			1	11	26	no work	4 25 "
Finisher.....	17	Germany..	"	s	2			2m	12			8 00 "
".....	17	"	"	s	2			4m	12			4 25 "
".....	27	New York	"	m	0			3m	6	182	no work	6 50 "
Chair-maker.....	26	"	U. S.....	w'r	1			2	8	78	"	10 00 "
".....	23	"	"	m	1			7	12			10 00 "
Finisher.....	13	Germany..	Germany..	s	2		%	2w	8		first work	2 00 "
".....	18	"	"	s	2			8m	12			5 00 "
Packer.....	15	"	"	s	2			1	12			2 00 "
".....	15	"	"	s	2			1	11	26	no work	3 75 "
Finisher.....	16	"	"	s	2			4m	12			5 00 "
".....	14	"	Poland....	s	2			4m	12			2 00 "
".....	14	"	"	s	2		%	1	12			55 d
".....	18	"	Germany..	s	2			1	12			5 50 w
".....	19	"	"	s	2			1	8	284	no work	4 50 "
".....	18	Michigan..	"	s	2			1	12			5 50 "

TABLE No. 9.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.		No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
330				0	no			no	none				*				14
624		\$594		\$108	"		\$18 00	yes	"	1			+				18
890				50	"			no	"				+				18
686		666		0	\$1,000			yes	"	1							14
851	0	851		0	900			no	"							\$5 00	14
234				0	no			"	"				*				13
548	0	496		0	1,800			yes	"	1	1		*				8
78				0	no		8 00	no	"				*				13
437		437		0	"			yes	"	1							16
455	\$150			40	"			no	"				\$3 50				15
347		347		0	"		4 00	"	guitar	1			4 50				10
409				0	"			"	none	1			*				10
108				0	"			"	"				*				13
658		658		300	"		15 00	yes	"	3			\$3,000				15
390		810		0	1,000	\$500		"	"	1			*				16
864				0	no			no	"				*				13
325	15	375		0	900	500		"	"								17
433	0			0	no			"	"		1		\$ 50				15
45				0	"			"	"				1 50				14
130				0	"			"	"				*				13
390	100	390		0	1,200	475		yes	"	1			4 00				14
312				0	no			no	"	1	1		5 00				14
230				0	"			"	banjo	1			*				9
150			*	0	"			"	none				*				13
104				0	"			"	"	1			*				14
311			*	0	"			"	otto hp				*				13
347				85	"			"	none				3 00				14
390				0	"			"	"				3 50				14
54			*	0	"			"	"				*				12
325			*	0	"			"	"				5 00				14
68			*	0	"			"	"				*				12
52			*	0	"			"	"				*				12
155			*	0	"			"	"				*				15
156			*	0	"			"	"				*				9
730			400	125	"			"	piano				4 00				14
303			*	0	"			"	guitar		1		*				12
156			*	0	"			"	none				*				14
231			*	0	"			"	"				*				14
141		141		0	"		5 00	yes	"	1			4 00				16
390			200	200	4,000			no	"	1			*				13
530		530	0	0	no		refuse	yes	"	1	1		5,000	1	15 00		15
52			*	0	"			no	"				*				13
200			*	0	"			"	"				*				12
104			*	0	"			"	"				*				13
131			*	0	"			"	"				*				13
280			*	0	"			"	"				*				13
104			*	0	"			"	"				*				13
172			*	0	"			"	"				*				13
236			*	0	"			"	guitar				*				16
58			*	0	"			"	none				*				17
288			0	0	"			"	"				3 00				14

* Gives wages to parents and lives at home. † Lives with parents and pays no stated amount.

TABLE No. 9.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	No. of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
WOLVERINE MANUFACTURING CO.													
Wire weaver.....	18	Germany	Germany	s	---	---	0	5	4	11	28	no work	\$10 00 w
Machine hand.....	31	Michigan	"	s	---	---	0	1	1	12	---	---	2 50 w
Foreman.....	44	Ireland	Ireland	m	5	5	6	23	2	12	---	---	2 25 d
Machine hand.....	31	Michigan	"	s	---	---	0	1m	1m	7	180	no work	1 25 w
Wire weaver.....	18	"	"	s	---	---	0	4	4	12	---	---	9 00 w
Machine hand.....	21	"	Germany	s	---	---	0	7	2	12	---	---	2 00 d
Spring fastener.....	19	Canada	Scotland	s	---	---	0	7	3½	9	---	sickness	2 50 w
"	16	Mass.	U. S.	s	---	---	0	2w	2w	10	52	no work	3 00 w
Cabinet-maker.....	28	Germany	Germany	m	---	0	2	14	2	12	---	---	2 00 d
"	30	"	"	m	5	0	4	37	6w	6	156	no work	1 50 "
Machine hand.....	17	Canada	England	s	---	---	0	3	2	9	78	"	5 50 w
"	21	"	Ireland	s	---	---	0	3	3	9	78	"	15 00 w
"	35	New York	Germany	m	1	0	2	4	2	9	78	"	2 25 d
Wire weaver.....	18	Illinois	England	s	---	---	0	3	2	10	52	"	10 00 w
Cabinet-maker.....	33	Michigan	Germany	s	---	---	0	7	3w	11½	19	"	1 75 d
Machine hand.....	24	"	Ireland	s	---	---	0	1	1	12	---	---	1 50 "
"	18	"	Belgium	s	---	---	0	2	7m	6	78	no work	1 00 "
"	22	"	Germany	s	---	---	0	1	1	11	28	"	7 50 w
Ass't foreman.....	30	New York	U. S.	m	3	1	4	2	2	12	---	---	10 00 "
RUDOLPH BOLTZ.													
Engineer.....	14	Germany	Germany	s	---	---	0	1	1	12	---	---	4 00 "
Cabinet-maker.....	20	Michigan	"	s	---	---	0	3	3	12	---	---	1 00 d
Finisher.....	16	"	"	s	---	---	0	3	3	12	---	---	4 50 w
Cabinet-maker.....	17	Germany	"	s	---	---	0	2	2	12	---	---	4 00 "
"	41	"	"	m	3	1	4	26	11	10½	36	not answered	2 00 d
Finisher.....	16	Michigan	"	s	---	---	0	1	8m	12	---	---	2 50 w
Cabinet-maker.....	21	Germany	"	s	---	---	0	7	7	12	---	---	1 75 d
"	25	"	"	m	1	0	2	3	3	11	26	no work	1 75 "
"	18	Michigan	"	s	---	---	0	3½	3½	12	---	---	1 00 "
"	17	"	"	s	---	---	0	2	2	12	---	---	3 00 w
"	18	Germany	"	s	---	---	0	2	2	12	---	---	4 00 "
Machine hand.....	28	"	"	m	2	1	3	16	1	11	26	no work	1 60 d
Machinist.....	24	"	"	m	0	0	2	3	3	12	---	---	1 65 "
Turner.....	29	"	"	m	5	1	6	15	7	7	180	no work	2 25 d
CHARLES FLACH.													
Cabinet-maker.....	34	"	"	m	0	---	1	20	5	6	---	not in U. S.	9 00 w
"	19	Michigan	"	s	---	---	1	5	5	12	---	---	9 00 "
"	18	Germany	"	s	---	---	0	3	3	12	---	---	4 50 "
"	23	"	"	s	---	---	0	10	10	6	---	not in U. S.	9 50 "
"	17	Michigan	"	s	---	---	0	1½	1½	12	---	---	3 00 "
"	17	"	"	s	---	---	0	2½	2½	12	---	---	4 00 "
"	37	Germany	"	m	3	2	4	20	1w	6	156	no work	10 00 "
"	25	Michigan	"	m	0	0	1	10	10	12	---	---	10 00 "
"	44	Germany	"	w'r	2	1	2	30	2m	10½	39	no work	1 50 d
Machine hand.....	18	Michigan	"	s	---	---	0	1½	1½	12	---	---	3 00 w
Cabinet-maker.....	17	Germany	"	s	---	---	0	1½	1½	12	---	---	3 50 "
"	47	"	"	m	4	1	2	22	32	12	---	---	15 50 "
Machine hand.....	32	"	"	m	0	0	1	7½	5	12	---	---	10 00 "

TABLE No. 9.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.		No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$477			*	0	no			no	none		1		*				18
515			*	0	"			"	"				*				15
858		958		0	\$1,500		\$12 00	yes	"				\$4 00	\$3,000	1	\$5 00	17
227			0	0	no			no	"		1		4 00	500			15
468			0	0	"			"	"		1		4 00				14
634			\$150	0	"			"	"	1			4 00				14
370			*	0	"			"	banjo		2		*				12
180			*	0	"			"	none				*				14
424	\$10	524	100	0	800	\$150	5 00	"	"	1		1				6 00	14
284	50	384	0	0	1,500	1,000		yes	"	1				1,000	1	5 00	18
314			*	0	no			no	"	1	1		*				18
585			0	0	"			"	guitar		1		4 00				9
393		293	0	0	"		5 00	yes	none				8 00	2,000	1	5 00	28
433			0	0	"			no	"		1		5 50	500			14
513			0	0	"			"	"				5 50				15
468			171	0	"			"	guitar	1			†	1,500	1	5 00	13
284			*	0	"			"	none				4 00				14
357			0	0	"			"	"				4 00				14
520		520	0	0	"		10 00	yes	"	1							9
208			*	0	"			no	"				*				18
313			30	0	"			"	violin		1		†		1	5 00	14
234			*	0	"			"	none				*				14
208			*	0	"			"	"				*				18
548	100	548	0	0	1,300			yes	"	1				2,000	1	5 00	14
180			*	0	no			no	guitar				4 00				15
545			50	0	"		4 00	yes	none		1						18
500	0	500	0	0	"			"	"				*				14
812			*	0	"			no	"	1			*				18
155			*	0	"			"	"				*				18
208			*	0	"			"	"				*				14
458		458	0	0	1,400	400		yes	"					2,000			12
515		515	0	0	no		8 00	"	"	1							15
409	0	409	0	0	"		5 50	"	"	1					1	4 00	13
284		284	0	0	"		7 50	no	"				3 00				14
486			0	0	"			"	guitar				*				14
234			*	0	"			"	none				3 50				18
247			0	0	"			"	"	1			*				18
158			*	0	"			"	"	1			*				15
208			*	0	"			"	"	1			*				14
290	0	290	0	0	300	500		yes	"						1	5 00	16
525		420	100	0	no		6 00	no	organ								15
409	0	409	0	0	"			"	none	1							6
158			*	0	"			"	"				*				16
182			*	0	"			"	"				*				13
508		681	125	0	1,300			yes	melod'n		8						15
580		480	60	0	no		6 00	no	violin	1							14

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 10.—Showing the totals

Name of Firm.		Whole number canvassed.	Number married.	Number single.	Total number of children in families.	Number of children attending school.	Total number of persons dependent for support.	Average number of months employed.	Total annual earnings.	Total amount of family expenses during the year.
M. J. Murphy & Co.	Males.....	152	34	118	67	15	98	9.9+	\$12,507	\$15,669
	Females.....	180	26	154	59	25	97	9.4+	17,966	.....
Hargreaves Manf'g Co.	Males.....	95	26	69	59	25	97	10.5+	36,796	14,343
	Females.....	18	18	0	1	1	1	10.4+	4,112	.....
F. Posseltus & Bros.	Males.....	66	34	32	88	14	112	10.4+	25,111	15,730
O. H. Haberkorn & Co.	Females.....	65	31	34	73	24	103	10.4+	29,726	14,324
Aertz, Meyers & Kirchberg.		49	17	32	31	14	50	10.9+	20,549	10,309
O. D. Widman & Co.	Males.....	35	7	28	23	6	26	10.3+	10,222	8,343
	Females.....	12	12	0	12	6	18	11.1+	1,418	.....
Gray & Baffy	Males.....	38	12	26	45	15	55	11.0+	11,816	6,518
	Females.....	5	1	4	1	2	3	11.3+	1,286	767
Wm. Wright.....		34	27	7	78	33	92	11.	20,936	16,538
Denizer Furniture Co.		33	17	16	36	8	61	10.2+	12,549	7,408
Hunt, Craine & Co.	Males.....	24	10	14	24	7	33	10.8+	10,310	5,978
	Females.....	4	4	0	4	2	6	11.7+	1,198	.....
A. A. Maynard.....		23	4	19	11	3	19	10.0+	6,519	1,980
Michigan Chair & Furniture Co.		20	8	12	2	2	4	10.8	4,487	661
Wolverine Manufacturing Co.		19	5	14	15	6	18	10.2+	8,192	2,478
Rudolph Bolts.....		14	5	9	11	3	18	11.3+	4,742	2,423
Chas. Flach.....		13	6	7	9	4	12	10.5	4,400	2,464
Totals.....		848	330	518	573	177	795	10.3+	\$275,579	\$120,338

of Table No. 9 by firms in Detroit.

Total amount saved during the year.	Total amount at interest or in bank.	Number owning homes.	Total value of homes.	Number of homes mortgaged.	Total amount of mortgages.	Number renting.	Average monthly rental.	Number boarding.	Average cost per week for board and room.	Total number having life insurance.	Total amount of life insurance.	Total number belonging to benefit societies.	Average weekly benefit.
\$1,945	\$1,982	19	\$27,930	9	\$6,370	22	\$7 75	38	\$3 09	17	\$23,947	17	\$3 38
100	175	1	1,000					11	1 38				
2,459	2,165	18	26,900	12	6,900	11	6 90	30	3 98	17	32,200	16	9 37
50	60							3	2 50				
1,045	2,325	14	18,250	6	2,450	20	7 10	9	3 27	10	13,200	15	10 06
2,106	1,910	19	20,750	11	6,200	17	6 20	20	3 72	10	13,050	18	5 77
615	520	9	6,150	4	1,900	9	7 00	16	3 29	2	2,500	5	4 80
560	225	4	5,700	2	900	3	6 00	9	3 50	4	5,200	3	3 33
25	65	4	4,200	1	500	7	11 42	8	3 25	8	12,904	7	6 43
100	200					3	4 66	1	3 00				
1,000	550	12	18,400	12	7,400	15	8 78	6	3 75	14	17,200	16	6 00
450	475	8	9,800	4	2,050	10	6 25	8	3 98	3	1,650	7	6 28
325	1,123	5	8,900	2	1,400	5	12 20	6	3 87	4	7,186	5	6 60
80								1	2 00				
870	375	3	3,100	3	1,575	2	9 50	9	3 72	1	3,000		
600	325	1	4,000			1	5 00	3	3 66	1	5,000	1	15 00
425		3	3,600	2	1,150	4	8 00	7	4 00	6	5,500	5	5 40
80		2	2,600	1	400	3	4 16	1	4 00	2	4,000	3	4 66
235	100	2	2,200	1	500	3	6 50	2	3 25			1	5 00
\$12,519	\$12,525	124	\$163,400	70	\$39,595	135	\$7 49	188	\$3 40	99	\$149,537	119	\$7 34

* All give wages to parents and live at home.

LABOR AND INDUSTRIAL STATISTICS.

TABLE No. 11.—Showing by age the number canvassed in each factory in Detroit, the average number of months employed, average annual earnings, and the average family expense per capita.

Name of Firm.	Location.	All over 19 years of age.					From 15 to 19 years.			15 Years and under.				
		Number canvassed.	Average number of months employed.	Average annual earnings.	No. of families canvassed.	Total annual family expense.	No. of persons supported.	Average annual family expense per capita.	Number canvassed.	Average number of months employed.	Average annual earnings.	Number canvassed.	Average number of months employed.	Average annual earnings.
M. J. Murphy & Co. { Males	Detroit.	74	10.2+	\$421 59	41	\$15,089	127	\$123 38	38	10.1+	\$197 00	40	9.2+	\$95 57

TABLE No. 12.—Showing number canvassed who support families, number owning and number renting homes, annual earnings of renters, and the percentage of earnings paid for rent, etc., in Detroit.

Name of Firm.	Location.	Number of families canvassed.	Number owning homes.	Percent of families owning homes.	Number renting homes.	Percent of families renting homes.	Total annual earnings of renters.	Total annual family expense of renters.	Total annual rent.	Per cent of earnings paid for rent.	Per cent of family expense paid for rent.
M. J. Murphy & Co.	Detroit	41	19	.46+	22	.53+	\$10,088 00	\$9,794 00	\$2,046 00	.20+	.20+
Hargreaves Manufacturing Co.	"	29	18	.62+	11	.37+	7,321 00	7,421 00	912 00	.12+	.12+
F. Fosselius & Bro.	"	24	14	.41+	20	.84+	10,866 00	9,646 00	1,704 00	.16+	.17+
C. E. Haberkorn & Co.	"	86	19	.22+	17	.47+	6,261 00	6,061 00	1,266 00	.20+	.20+
Aerts, Meyers & Kirchberg	"	18	9	.50	9	.50	5,844 00	5,846 00	766 00	.12+	.12+
C. D. Widman & Co.	"	17	4	.24+	3	.18+	1,244 00	1,244 00	216 00	.17+	.17+
Gray & Baffy	"	14	4	.28+	10	.71+	5,060 00	4,907 00	1,126 00	.22+	.22+
Wm. Wright	"	27	12	.44+	16	.58+	9,698 00	8,868 00	1,681 00	.16+	.17+
Denizer Furniture Co.	"	18	8	.44+	10	.56+	4,764 00	4,769 00	760 00	.15+	.15+
Hunt, Oraine & Co.	"	10	5	.50+	5	.50	2,959 00	2,879 00	725 00	.24+	.25+
A. A. Maynard	"	6	3	.50	3	.50	1,215 00	1,005 00	228 00	.18+	.22+
Michigan Chair & Furniture Co.	"	2	1	.50	1	.50	661 00	661 00	60 00	.09+	.09+
Wolverine Manufacturing Co.	"	7	3	.42+	4	.57+	1,670 00	1,670 00	384 00	.23+	.23+
Rudolph Bolts	"	5	2	.40	3	.60	1,424 00	1,424 00	160 00	.10+	.10+
Chas. Flach	"	5	2	.40	3	.60	1,663 00	1,623 00	234 00	.13+	.15+

TABLE No. 13.—Showing by firms in Detroit, the number 19 years of age and over, the nationality, conjugal relations, etc.

LABOR AND INDUSTRIAL STATISTICS.

Name of Firm.	Location.	Number canvassed.	Number born in U. S.	Number born of American parents.	Number born in U. S. of foreign parents.	Number foreign born.	Number married.	Number single.	Number supporting others than themselves.	Number of persons so supported.	Kind of work.		Read.		Write.	
											Hand.	Machine.	Yrs.	No.	Yrs.	No.
M. J. Murphy & Co.	Detroit	74	32	14	13	42	34	40	35	93	38	36	71	3	71	3
	"	23	11		11	12		23			18	5	23		23	
Hargreaves Mfg. Co.	"	55	21	3	13	26	26	31	29	38	47	9	55	1	55	1
	"	10	5		5	5		10			10		10		10	
F. Poesellus & Bros.	"	45	19	3	16	26	34	11	34	111	27	18	43	3	43	3
C. H. Baberkorn & Co.	"	51	13	3	15	37	31	24	31	97	34	21	54	1	54	1
Aertz, Meyers & Kirchberg.	"	31	11	2	11	20	17	14	18	46	19	12	22	6	22	6
C. D. Widman & Co.	"	12	5	2	3	7	7	5	7	25	10	2	12		12	
	"	2	2		2			2			2		2		2	
Gray & Baffy	"	18	6		6	12	12	6	12	49	15	3	18		18	
	"	4	3		3	1	1	3	2	2	1	3	4		4	
Wm. Wright	"	33	6	1	5	27	27	6	27	92	31	2	32	1	32	1
Denizer Furniture Co.	"	26	5		5	20	17	3	16	54	16	9	26		26	
Hunt, Crane & Co.	"	16	6	3	3	10	10	6	10	31	10	6	16		16	
	"	8	2		2	1		3			3		8		8	
A. A. Maynard	"	13	7	2	5	6	4	9	5	17	6	7	13		13	
Michigan Chair and Furniture Co.	"	4	3	2	1	1	3	1	2	2	4		4		4	
	"															
	"	12	8	1	7	4	6	7	5	18	6	7	12		12	
	"	7	1		1	6	5	2	5	18	4	3	7		7	
	"	7	1		1	6	6	2	5	11	6	1	7		7	

TABLE NO. 15.—Showing by firms in Detroit the number canvassed, 15 years of age and under, the nationality, etc.

Name of Firm.	Location.	Number employed.	Number born in U. S.	Number born of American parents.	Number born in U. S. of foreign parents.	Number foreign born.	Average age began work.	Kind of work.		Read.		Write.	
								Hand.	Machine.	Yes.	No.	Yes.	No.
M. J. Murphy & Co. { Males..... Females.....	Detroit.....	40 53	18 28	1	17 28	22 25	12.7+ 13.	31 53	9	38 51	2 2	38 50	2 3
Hargreaves Manufacturing Co.....	"	7	3	—	2	4	12.7+ 12.3+	6	1	7	1	7	—
F. Posselius & Bros.....	"	8	5	—	3	3	12.3+	5	3	7	—	7	1
C. H. Haberkorn.....	"	3	3	—	3	—	12.6+ 13.	3	—	3	—	3	—
Aertiz, Meyers & Kirchberg.....	"	1	1	—	1	—	13.	1	—	1	—	1	—
C. D. Widman & Co. { Males..... Females.....	"	10 7	2 5	2 1	2 3	8 2	13.3 12.3+	7 7	3	9 7	1 1	9 7	1 1
Gray & Baffy.....	"	2	1	—	1	1	14.	2	—	1	1	1	—
Denizer Furniture Co.....	"	5	3	—	3	2	13.3	4	1	6	—	6	—
Hunt, Oraine & Co.....	"	1	—	—	—	1	13.	1	—	1	—	1	—
A. A. Maynard.....	"	3	2	—	2	—	12.6+	1	2	3	—	3	—
Michigan Chair & Furniture Co.....	"	7	—	—	—	7	12.1+	7	—	5	2	5	2
Rudolph Boltz.....	"	1	—	—	—	1	13.	—	1	1	—	1	—

TABLE No. 16.—*Reports from firms in Detroit.*

Names of firms.	Whole number employed May 1, 1899.	Aggregate wages paid dur- ing the year.	Wholesale value of goods manufactured during the year.
M. J. Murphy & Co.....	400	\$75,000	\$325,000
Hargreaves Manufacturing Co.....		no report	
F. Posselius & Bros.....	88	40,295	101,586
C. H. Haberkorn & Co.....	95	80,000	100,000
Aertz, Meyers & Kirchberg	75	28,148	100,000
C. D. Widman & Co.....		no report	
Gray & Baffy.....	79	20,000	75,000
Wm. Wright.....		no report	
Denizer Furniture Co.....	42	12,500	40,000
Hunt, Craine & Co.....		no report	
A. A. Maynard.....		no report	
Michigan Chair and Furniture Co.....		no report	
Wolverine Manufacturing Co.....		no report	
Rudolph Boltz.....		no report	
Charles Flach.....	14	5,404	7,581
Total.....	788	\$211,847	\$749,187

SYNOPSIS OF FIRMS IN DETROIT.

M. J. MURPHY & CO.,

Manufacturers of chairs, woven wire mattresses and spring beds. Total wholesale value of goods manufactured during the past fiscal year, \$825,000. Number of employes, 400. Total amount of wages paid during the past fiscal year, \$75,000. Number of employes canvassed by this bureau, 282, of which 152 were men and boys, and 130 were girls. The canvass of the men resulted as follows: Nationality: Americans, 70; Germans, 58; Polanders, 22; Canadians, 4; Frenchmen, 1; Irishmen, 1; Englishmen, 1. Parentage of those born in the United States: American, 20; German, 26; Polish, 8; English, 5; Irish, 8; French, 8; Swiss, 2; Holland, 1; Belgian, 1; Scotch, 1. Thirty-three are married, 118 single, 1 widower. There are 67 children in the families, of which 15 attend school. One hundred and sixteen of the employes support themselves only, while 86 support, other than themselves, 98 persons. Total number of months employed during the year, 1,514 $\frac{1}{4}$, an average of 9.9+. During the year 122 men lost time amounting to 5,876 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$42,507. Of the foreigners 10 are not naturalized; 7 had \$1,029 upon arrival in this country, and 4 have sent \$46 to relatives in the old country. Nine employes paid \$54.50 for working tools during the year. Total annual family expenses \$15,669. Seventy-four of the employes live at home and give their wages to their parents. Twenty-one men saved \$1,845 during the year. Eighteen have money at interest, amounting to \$1,932. Nineteen own homes valued at \$27,950. Of those owning homes 9 are mortgaged for \$6,270. Twenty-two rent and pay a monthly rental of \$170.50, an average of \$7.75. Eighteen families own sewing machines; 8 persons have organs, 1 a piano, 2 violins, 1 an accordeon, 6 guitars, 2 violins and horn, 2 organs and violin, 1 a clarinet. Fifty-four take newspapers and magazines, as follows: 46 dailies, 34 weeklies and 2 monthlies. Thirty-eight board and pay \$117.75 per week, an average of \$3.09. Seventeen carry a total life insurance of \$23,947. Seventeen belong to benevolent societies, representing a weekly sick benefit of \$141.50, an average of \$8.32. One hundred and forty-nine had good health when they began work, 1 poor and 2 did not answer. Present state of health: 145 good, 4 fair and 3 did not answer. Six cannot read or write. None are subject to loss of wages by error, waste or breakage. Twenty-three are required to exercise more than ordinary care to prevent accident to themselves or others. Sixteen reported a decrease of wages during the past five years, 23 an increase, 25 the same, 26 did not answer, 60 are boys under 18 years of age and 2 have been in this country less than one year. Seventy-eight pay cash when they purchase goods, 2 cash and credit, 5 buy on credit, 67 did not answer. Two keep an itemized account of their expenses. Seventy-one are as well off as they were 5 years ago, 16 are not, 3 did not answer, 60 are boys under 16 years of age and 2 have been in this country less than one year.

The canvass of the girls resulted as follows : Nationality : Americans, 61 ; Germans, 43 ; Polanders, 17 ; Canadians, 7 ; Hollanders, 2. Parentage of those born in the United States : American, 1 ; German, 47 ; Polish, 7 ; Holland, 2 ; Swiss, 1 ; Canadian, 1 ; Scotch, 1 ; Irish, 1. All are single. Total number of months employed during the year, 1,234½, an average of 9.4+. During the year 105 girls lost time amounting to 4,108 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$17,996. One hundred and sixteen live at home and give their wages to their parents. During the year one girl saved \$100. Three have money at interest, amounting to \$175. One owns a house and lot valued at \$1,000. None own sewing machines. Three have organs, 1 a piano, 1 a zither and 1 a harp. Five take papers, as follows : 3 dailies and 2 weeklies. Eleven board and pay \$18.25 per week, an average of \$1.66. One hundred and twenty-nine had good health when they began work and 1 did not answer. Present state of health : 116 good, 9 fair and 5 poor. Seven cannot read or write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accident to themselves or others. Five reported wages decreased during the past 5 years, 8 increased, 3 the same, 37 did not answer, 79 are girls under 16 years of age and 8 have been in this country less than a year. Those who reported a decrease of wages gave as a reason : 3 cut down, 1 won't pay as much, 1 did not answer. Those who reported an increase of wages gave as a reason : 1 older, 1 more to attend to, 1 worked here longer. Nine pay cash when they purchase goods and 121 did not answer the question. None keep an itemized account of their expenses. Thirty-nine are as well off as they were 5 years ago, 9 are not, 79 are girls under 16 years of age and 8 have been in this country less than one year. Those who are not as well off gave as a reason : 1 less wages, 1 lost father, 1 work earned more, 1 father can't get work, 1 father is sick, 1 sickness, 1 sickness in the family, 2 poor health.

HARGREAVES MANUFACTURING CO.

Information refused by this company. Number of employes canvassed by this bureau, 118, of which 95 are men and 18 girls. The canvass of the men resulted as follows : Nationality : Americans, 47 ; Germans, 35 ; Englishmen, 7 ; Canadians, 4 ; Polanders, 2. Parentage of those born in the United States : American, 5 ; German, 21 ; English, 8 ; Irish, 8 ; Scotch, 2 ; Polish, 1 ; Canadian, 1 ; Austrian, 1. Twenty-five are married, 69 single and 1 a widower. There are 59 children in the families, of which 25 attend school. Sixty of the employes support themselves only, while 35 support, other than themselves, 97 persons. Total number of months employed during the year, 1,003, an average of 10.5+. During the year 53 men lost time amounting to 3,276 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$36,798. Of the foreign born 4 are not naturalized; 4 had \$440 upon arrival in this country and 3 have sent \$104 to relatives in the old country. Nine employes paid \$63.50 for working tools during the year. Total annual family expenses, \$14,818. Thirty-six of the employes live at home and give their wages to their parents. Eighteen men saved \$2,459 during the year. Eleven men have money at interest, amounting to \$2,165. Eighteen own homes, valued at \$25,800. Of those owning homes 12 are mortgaged for \$6,900. Eleven rent and pay \$76.00 per month, an average of \$6.90. Nineteen families own sewing machines; 2 persons have organs, 2 accordions, 2 cornets, 2 horns, 1 a clarinet, 2 banjos, 4 violins, 2 guitars. Forty-seven take newspapers and magazines, as follows: 40 dailies,

22 weeklies and 6 monthlies. Thirty board and pay \$119.50 per week, on average of \$8.98. Seventeen carry a total life insurance of \$32,200. Sixteen belong to benefit societies representing a weekly sick benefit of \$150 [per week, an average of \$9.37. Ninety had good health when they began work, 4 fair and 1 did not answer. Present state of health: 88 good, 12 fair. One cannot read or write. One is subject to loss of wages by error, waste or breakage. Four are required to exercise more than ordinary care to prevent accident to themselves and others. Ten reported wages decreased during the past 5 years, 81 increased, 29 the same, 18 did not answer, 18 are boys under 16 years of age. Seventy-nine pay cash when they purchase goods, 1 cash and credit, 1 buys on credit, and 14 did not answer. Seventy-seven are as well off as they were 5 years ago, 5 are not, 18 are boys under 16 years of age.

The canvass of the girls resulted as follows: Nationality: Americans, 8; Germans, 6; Canadians, 2; English, 1; Scotch, 1. Parentage of those born in the United States: German, 8; French, 1; Scotch, 1; English, 1; Irish, 2. All are single. One supports 1 person other than herself. Total number of months employed during the year, 188½; average number of months employed, 10.4+. During the year 11 girls lost time amounting to 559 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$4,112. Twelve of the girls live at home and give their wages to their parents. One saved \$50 during the year, and 1 has \$60 at interest. None own sewing machines; 5 persons have organs, 1 a piano and 1 a guitar. Seven take newspapers and magazines, as follows: 6 dailies, 8 weeklies, 1 monthly. Three board and pay \$7.50 per week, an average of \$2.50. All had good health when they began work. Present state of health: 15 good, 2 fair, 1 poor. All can read and write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accident to themselves or others. None reported wages decreased, 4 increased, 8 the same, 10 did not answer, and 1 is a girl under 16 years of age. Eight pay cash when they purchase goods, 1 cash and credit, and 9 did not answer. None keep an itemized account of their expenses. Sixteen are as well off as they were 5 years ago, 1 is not, and 1 is under 16 years of age.

F. POSSELIUS & BROS.,

Manufacturers of cheap and medium priced bedroom suits and beds. Total wholesale value of goods manufactured during the past fiscal year, \$101,586. Number of employes, 88. Total amount of wages paid during the past fiscal year, \$40,295. Number of employes canvassed by this bureau, 66. Nationality: Americans, 32; Germans 28; Belgians, 6; Canadians, 4; Polanders, 1. Parentage of those born in the United States: American, 4; German, 24; Belgian, 2; French, 1; English, 1. Thirty-four are married and thirty-two single. There are 88 children in the families, of which 14 attend school. Thirty-one of the employes support themselves only, while 35 support, other than themselves, 118 persons. Total number of months employed during the year, 686½, an average of 10.4+. During the year 53 men lost time amounting to 1,924 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$25,111. Six of the foreigners are not naturalized; 10 had \$1,722 upon arrival in this country and 4 have sent \$185 to relatives in the old country. Eight employes paid \$116 for working tools during the year. Total annual family expenses, \$15,730. Twenty-one of the employes live at home and give their wages to their parents. Six men saved

\$1,045 during the year. Nine have money at interest, amounting to \$2,325. Fourteen own homes, valued at \$18,250. Of those owning homes 6 are mortgaged for \$3,450. Twenty rent and pay \$142 per month, an average of \$7.10. Twenty families own sewing machines, and one person has a violin and piano. Thirty-one take newspapers and magazines, as follows: 23 dailies, 15 weeklies and 2 monthlies. Nine board and pay \$39.50 per week, an average of \$3.27. Ten carry a total life insurance of \$13,200. Fifteen belong to benefit societies, representing a weekly sick benefit of \$151, an average of \$10.06. All had good health when they began work and all have good health at the present time. Four cannot read or write. None are subject to loss of wages by error, waste or breakage. Eighteen are required to exercise more than ordinary care to prevent accident to themselves or others. Ten reported a decrease of wages during the past 5 years, 20 an increase, 21 the same, 14 are boys under 16 years of age and 1 has been in this country less than one year. Forty-seven pay cash when they purchase goods, 3 cash and credit, 2 buy on credit, 14 did not answer. Two keep an itemized account of their expenses. Forty are as well off as they were 5 years ago, 7 are not, 4 are better off, 14 are boys under 16 years of age, and 1 has been in this country less than one year.

C. H. HABERKORN & CO.,

Manufacturers of parlor tables. Total wholesale value of goods manufactured during the past fiscal year, \$100,000. Number of employes, 95. Total amount of wages paid during the past fiscal year, \$30,000. Number of employes canvassed by this bureau, 65. Nationality: Americans, 22; Germans, 33; Canadians, 7; Austrians, 1; Russians, 1; Brazilians, 1. Parentage of those born in the United States: American, 8; German, 16; French, 2; Polish, 1. Thirty are married, 34 single and 1 a widower. There are 78 children in the families, of which 24 attend school. Thirty of the employes support themselves only, while 35 support, other than themselves, 108 persons. Number of months employed during the year, 681, an average of 10.4. During the year 48 men lost time amounting to 2,577 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$29,726. Of the foreigners 7 are not naturalized; 6 had \$365 upon arrival in this country, and 5 have sent \$153 to relatives in the old country. Sixteen employes paid \$127.50 for working tools during the year. Total annual family expenses, \$14,324. Nine of the employes live at home and give their wages to their parents. Sixteen men saved \$2,105 during the year. Eleven have money at interest, amounting to \$1,910. Nineteen own homes, valued at \$20,750. Of those owning homes 11 are mortgaged for \$6,200. Seventeen rent and pay \$105.50 per month, an average of \$6.20. Twenty-three families own sewing machines; 8 persons have accordions, 4 violins, 1 a flute, 1 a guitar, 1 a banjo, and 1 a guitar, violin and zither. Thirty-six take newspapers, as follows: 30 dailies and 17 weeklies. Twenty board and pay \$74.50 per week, an average of \$3.73. Ten carry a total life insurance of \$13,050. Eighteen belong to benefit societies, representing a weekly sick benefit of \$104, an average of \$5.77. All had good health when they began work. Present state of health: 59 good, 5 fair, 1 poor. Two cannot read or write. None are subject to loss of wages by error, waste or breakage. Twelve are required to exercise more than ordinary care in order to prevent accident to themselves or others. Fourteen reported a decrease of wages during the past 5 years; 19 an increase; 25 the same; 4 did not answer and 3 are boys under 16 years of age. Thirty-six pay cash when they purchase

goods, 9 cash and credit, 12 buy on credit, and 8 did not answer. Three keep an itemized account of their expenses. Fifty-six are as well off as they were 5 years ago, 5 are not, 1 did not answer and 3 are boys under 16 years of age.

AERTZ, MEYERS & KIRCHBERG,

Manufacturers of desks, common beds and bedroom furniture. Total wholesale value of goods manufactured during the past fiscal year, \$100,000. Number of employes, 75. Total amount of wages paid during the past fiscal year, \$28,148. Number of employes canvassed by this bureau, 49. Nationality: Americans, 24; Germans, 19; Belgians, 3; Italians, 1; Polanders, 1; Canadians, 1. Parentage of those born in the United States: American, 2; German, 22. Seventeen are married and 82 single. There are 81 children in the families, of which 14 attend school. Twenty-six employes support themselves only, while 23 support, other than themselves, 50 persons. Total number of months employed during the year, 538½, an average of 10.9+. During the year 16 men lost time amounting to 1,124 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$20,539. Of the foreigners 8 are not naturalized; 3 had \$106 upon arrival in this country and 4 have sent \$105 to relatives in the old country. Six employes paid \$18.56 for working tools during the year. Total annual family expenses, \$10,809. Sixteen of the employes live at home and give their wages to their parents. Seven men saved \$615 during the year. Three have money at interest, amounting to \$520. Nine own homes valued at \$9,150. Of those owning homes 4 are mortgaged for \$1,900. Nine rent and pay \$68 per month, an average of \$7. Eight of the families own sewing machines; 2 persons have pianos, 2 guitars, 1 an accordion, 1 a violin, 1 a bass viol and 1 a banjo and guitar. Twenty-five take newspapers and magazines, as follows: 16 dailies, 13 weeklies and 4 monthlies. Sixteen board and pay \$52.75 per week, an average of \$3.29. Two carry a total life insurance of \$2,500. Five belong to benefit societies, representing a weekly sick benefit of \$24, an average of \$4.80. Forty-seven had good health when they began work and 2 did not answer. Present state of health: 47 good and 2 fair. Eleven cannot read or write. None are subject to loss of wages by error, waste or breakage. Eight are required to exercise more than ordinary care to prevent accident to themselves or others. Two reported a decrease of wages during the past 5 years, 23 an increase, 10 the same, 4 did not answer, 8 are boys under 16 years of age and 2 have been in this country less than 1 year. Thirty-one pay cash when they purchase goods, 1 cash and credit and 17 did not answer. Three keep an itemized account of their expenses. Thirty-six are as well off as they were 5 years ago, 1 is not, 2 did not answer, 8 are boys under 16 years of age and 2 have been in this country less than one year.

C. D. WIDMAN & CO.,

Manufacturers of all kinds of picture and mirror frames and mouldings. Number of employes canvassed by this bureau, 47, of which 35 were men and boys and 12 girls. The canvass of the men resulted as follows: Nationality: Americans, 16; Germans, 13; Polanders, 4; Italians, 1; Canadians, 1. Parentage of those born in the United States: American, 8; German, 11; Irish, 2. Seven are married and 28 are single. There are

28 children in the families, of which 6 attend school. Twenty-eight of the employees support themselves only, while 7 support, other than themselves, 26 persons. Total number of months employed during the year, 362, an average of 10.8+. During the year 10 men lost time amounting to 845 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$10,222. One foreigner had \$80 upon arrival in this country, and 2 have sent \$370 to relatives in the old country. Three employees paid \$39 for working tools during the year. Total annual family expenses, \$3,348. Eighteen of the employees live at home and give their wages to their parents. Two men saved \$560 during the year. Three have money at interest, amounting to \$225. Four own homes, valued at \$5,700. Of those owning homes 2 are mortgaged for \$900. Three rent and pay a monthly rental of \$18, an average of \$6. Five families own sewing machines; 1 person has an organ, 1 a violin and 1 a violin and guitar. Eleven take newspapers and magazines, as follows: 10, dailies; 5 weeklies; 1, monthly. Nine board and pay \$31.50 per week, an average of \$3.50. Four carry a total life insurance of \$5,200. Three belong to benefit societies, representing a weekly sick benefit of \$25, an average of \$8.33. All had good health when they began work. Present state of health: 34 good, 1 poor. One cannot read or write. Three are subject to loss of wages by error, waste or breakage. Six are required to exercise more than ordinary care to prevent accident to themselves or others. Five reported wages decreased during the past 5 years, 4 increased, 3 the same, 8 did not answer, 4 are boys under 16 years of age and 1 has been in this country less than one year. Thirteen pay cash when they purchase goods, 1 cash and credit, 1 buys on credit and 20 did not answer. Two keep an itemized account of their expenses. All who answered the question, 20 in number, said that they were as well off as they were 5 years ago.

The canvass of the girls resulted as follows: Nationality: Americans, 9; Germans, 3. Parentage of those born in the United States: American, 4; German, 3; Irish, 1; Scotch, 1. All are single. Total number of months employed during the year, 184, an average of 11.1+. During the year 4 girls lost time amounting to 182 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$1,413. One girl paid 75 cents for working tools during the year. Eleven live at home and give their wages to their parents. None have saved any money nor have money at interest. None own sewing machines; one owns a piano and 1 a guitar. None take newspapers. Eleven had good health when they began work and 1 fair. Present state of health: 11 good and 1 fair. All can read and write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accident to themselves or others. The question of decrease and increase of wages was not answered. One pays cash when she purchases goods and 11 did not answer the question. None keep an itemized account of their expenses. All are as well off as they were 5 years ago.

GRAY & BAFFY.

All kinds of furniture made to order, only; specialty, upholstery goods. Total wholesale value of goods manufactured during the past fiscal year, \$75,000. Number of employees, 79. Total amount of wages paid during the past fiscal year, \$20,000. Number of employees canvassed by this bureau 43, of which 38 are men and boys and 5 girls. The canvass of the men resulted as follows: Americans, 18; Germans, 11; Eng-

lishmen, 8; Canadians, 8; Swiss, 1; Belgians, 2. Parentage of those born in the United States: American, 1; German, 15; Norwegian, 1; English, 1. Twelve are married, and 26 are single. There are 45 children in the families, of which 15 attend school. Twenty-three employes support themselves only, while 15 support, other than themselves, 55 persons. Total number of months employed during the year, 420, an average of 11.0+. During the year 13 employes lost time amounting to 676 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$11,816. Five of the foreigners had \$786 upon arrival in this country. Eighteen employes paid \$128.80 for working tools during the year. Total annual family expenses, \$6,518. Eighteen of the employes live at home and give their wages to their parents. One man saved \$25 during the year. Two have money at interest, amounting to \$65. Four own homes, valued at \$4,900. Of those owning homes, 1 is mortgaged for \$500. Seven rent and pay a monthly rental of \$80, an average of \$11.42. Eight families own sewing machines; 4 persons have guitars, 1 a harp, 1 a piano, and 1 a violin. Eighteen take newspapers, 13 dailies, and 10 weeklies. Eight board and pay \$26.00 per week, an average of \$3.25. Eight carry a total life insurance of \$12,904. Seven belong to benefit societies, representing a weekly sick benefit of \$45 per week, an average of \$6.43. All had good health when they began work, and all have good health at the present time. Two cannot read or write. One is subject to loss of wages by error, waste or breakage. Two are required to exercise more than ordinary care to prevent accident to themselves or others. Five reported wages decreased during the past five years, 7 increased, 4 the same, 12 did not answer, 8 were boys under 16 years of age, and 2 have been in this country less than 1 year. Seventeen pay cash when they purchase goods, 1 cash and credit, 3 buy on credit, 17 did not answer. None keep an itemized account of their expenses. Twenty-three are as well off as they were 5 years ago, 4 are not, 1 did not answer, 8 are boys under 16 years of age, and 2 have been in this country less than one year.

The canvass of the girls resulted as follows: Nationality: Americans, 4; Canadians, 1. Parentage of those born in the United States: German, 4. Four are single, and 1 is a widow with 1 child, who does not attend school. Three support themselves only, while 2 support, other than themselves, 2 persons. Total number of months employed during the year, 56½, an average of 11.8. During the year 2 girls lost time amounting to 91 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$1,286. Annual family expenses, \$767. One of the girls lives at home and give her wages to her parents. One saved \$100 during the year. One has money at interest, amounting to \$200. Three rent and pay a monthly rental of \$14, an average of \$4.66. Two own sewing machines; none musical instruments. Four take newspapers: 1 daily and 3 weeklies. One boards and pays \$3 per week. All had good health when they began work, and all have good health at the present time. All can read and write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents to themselves or others. Three reported wages the same as five years ago, and 2 did not answer. Three pay cash when they purchase goods, and 2 did not answer. None keep an itemized account of their expenses. All are as well off as they were five years ago.

WM. WRIGHT,

Manufacturer of art furniture. Number of employes canvassed by this bureau, 84. Nationality: Americans, 7; Germans, 14; Hollanders, 1; Canadians, 2; Belgians, 4; Swedes, 1; Englishmen, 1; Irishmen, 2; Austrians, 1; Frenchmen 1. Parentage of those born in the United States: American, 1; German, 4; Scotch, 1; English, 1. Twenty-seven are married and 7 are single. There are 78 children in the families, of which 33 attend school. Seven employes support themselves only, while 27 support, other than themselves, 92 persons. Total number of months employed during the year, 374, an average of 11. During the year 11 men lost time amounting to 884 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$20,956. Of the foreigners 2 are not naturalized; 15 had \$1,505 upon arrival in this country, and 4 have sent \$320 to relatives in the old country. Seventeen employes paid \$249 for working tools during the year. Total annual family expenses, \$16,588. One of the employes lives at home and gives his wages to his parents. Eight men saved \$1,000 during the year. Four have money at interest amounting to \$550. Twelve own homes valued at \$16,400. All are mortgaged for a total of \$7,400. Fifteen rent and pay a monthly rental of \$181.75, an average of \$8.74. Nineteen of the families own sewing machines; 2 persons have organs, 1 a piano, 2 violins, 1 a banjo, 1 a zither, 1 a guitar and 1 a banjo and violin. Twenty-six take newspapers and magazines: 22 dailies, 17 weeklies, and 5 monthlies. Six board and pay \$22.50 per week, an average of \$3.75. Fourteen carry a total life insurance of \$17,200. Sixteen belong to benefit societies, representing a weekly sick benefit of \$96, an average of \$6.00. Thirty-three had good health when they began work, and 1 did not answer. Present state of health: 32 good, 1 fair, and one did not answer. One cannot read or write. None are subject to loss of wages by error, waste or breakage. Only 1 is required to exercise more than ordinary care to prevent accidents. Eleven reported a decrease of wages during the past five years, 3 an increase, 19 the same, and 1 has been in this country less than one year. Thirty-two pay cash when they purchase goods, 1 cash and credit, and only one buys on credit. Only 1 keeps an itemized account of his expenses. Twenty-nine are as well off as they were five years ago, and 4 are not as well off.

THE DENIZER FURNITURE CO.,

Manufacturers of lounges and parlor frames in the white. Total wholesale value of goods manufactured during the past fiscal year, \$40,000. Number of employes, 42. Total amount of wages paid during the past fiscal year, \$12,500. Number of employes canvassed by this bureau, 33. Nationality: Americans, 11; Germans, 18; Canadians, 3; Englishmen, 1. Parentage of those born in the United States: German, 9; English, 1; Scotch, 1. Seventeen are married and 16 are single. There are 86 children in the families, of which 8 attend school. Thirteen of the employes support themselves only, while 20 support, other than themselves, 61 persons. Total number of months employed during the year, 839½, an average of 10.2+. During the year 10 men lost time amounting to 754 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$18,549. Of the foreigners 4 are not naturalized; 7 had \$1,940.50 upon arrival in this country, and 3 have sent \$255 to relatives in the old country. Thirteen employ s

paid \$94.60 for working tools during the year. Total annual family expenses, \$7,408. Nine of the employes live at home and give their wages to their parents. Four men saved \$450 during the year. Five have money at interest, amounting to \$475. Eight own homes valued at \$9,900. Of those owning homes 4 are mortgaged for \$2,050. Ten rent and pay a monthly rental of \$62.50, an average of \$6.25. Fourteen families own sewing machines; 1 person has an organ, 1 a horn, 1 a clarinet, 1 a guitar, 1 a zither and 2 violins. Eighteen take newspapers and magazines: 12 dailies, 9 weeklies and 2 monthlies. Eight board and pay \$31.50 per week, an average of \$3.98. Three carry a total life insurance of \$1,650. Seven belong to benefit societies, representing a weekly sick benefit of \$44, an average of \$6.23. Thirty-two had good health when they began work and 1 fair. Present state of health: 26 good, 5 fair, 1 poor, and 1 did not answer. All can read and write. None are subject to loss of wages by error, waste or breakage. Six are required to exercise more than ordinary care to prevent accidents. Seven reported a decrease of wages during the past 5 years, 6 an increase, 9 the same, 6 did not answer, and 5 are boys under 16 years of age. Twenty-two pay cash when they purchase goods, 1 cash and credit, 2 buy on credit, and 8 did not answer. Two keep an itemized account of their expenses. Twenty-five are as well off as they were 5 years ago, 3 are not, and 5 are boys under 16 years of age.

HUNT, CRAINE & CO.

No report from this firm. Number of employes canvassed by this bureau, 28, of which 24 are men and boys and 4 are girls. The canvass of the men and boys resulted as follows: Nationality: Americans, 6; Germans, 15; Canadians, 2; Scotchmen, 1. Parentage of those born in the United States: German, 4; Scotch, 1; Irish, 1. Ten are married and 14 are single. There are 24 children in the families, of which 7 attend school. Thirteen of the employes support themselves only, while 11 support, other than themselves, 83 persons. Total number of months employed during the year, 260½, an average of 10.8+. During the year 5 employes lost time amounting to 559 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$19,810. One of the foreigners had \$100 upon arrival in this country, and 1 has sent \$10 to relatives in the old country. Eight employes paid \$49 for working tools during the year. Total annual family expenses, \$5,878. Six of the employes live at home and give their wages to their parents. Eight men saved \$325 during the year. Eight have money at interest, amounting to \$1,128. Five own homes valued at \$8,800. Of those owning homes, 2 are mortgaged for \$1,400. Five rent and pay a monthly rental of \$61, an average of \$12.20. Seven families own sewing machines; 1 person has an organ, 2 violins, 1 a guitar and 1 an accordion. Eleven take newspapers and magazines: 11 dailies, 5 weeklies and 2 monthlies. Six board and pay \$20.25 per week, an average of \$3.87. Four carry a total life insurance of \$7,186. Five belong to benefit societies, representing a weekly sick benefit of \$38, an average of \$6.60. Twenty-three had good health when they began work and 1 fair. Present state of health: 21 good and 3 fair. None are subject to loss of wages by error, waste or breakage. One is required to exercise more than ordinary care to prevent accident. Two reported wages decreased during the past 5 years, 4 increased, 18 the same, 8 did not answer, and 2 are boys under 16 years of age. Fourteen pay cash when they purchase goods, 1 cash and credit, 1 buys on credit and 8 did not answer. One keeps an itemized account of his

expenses. Twenty are as well off as they were 5 years ago, 2 are not and 2 are boys under 16 years of age.

The canvass of the girls resulted as follows: Nationality: Americans, 3; Germans, 1. Parentage of those born in the United States: Germans, 3. All are single. Number of months employed during the year, 47, an average of 11.7+. During the year 1 girl lost time amounting to 26 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$1,198. Two girls saved \$80 during the year. Two live at home and give their wages to their parents. Three take newspapers: 2 dailies and 4 weeklies. One boards and pays \$2 per week. All had good health when they began work and all have good health now. None are subject to loss of wages on account of error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents. Two reported wages increased during the past 5 years, 1 the same.

A. A. MAYNARD.

No report from this firm. Number of employes canvassed by this bureau, 22. Nationality: Americans, 11; Germans, 10; Canadians, 1. Parentage of those born in the United States: American, 2; German, 7; Scotchmen, 1; Canadian, 1. Four are married and 18 are single. There are 11 children in the families, of which 3 attend school. Fifteen employes support themselves only, while 7 support, other than themselves, 19 persons. Total number of months employed during the year, 220½, an average of 10.0+. During the year 20 men lost time amounting to 1,181 days. All work ten hours, are paid semi-monthly, and in cash. Total annual earnings, \$6,519. Three of the foreigners had \$265 upon arrival in this country, and 1 has sent \$60 to relatives in the old country. Four men paid \$9.75 for working tools during the year. Seven of the employes live at home and give their wages to their parents. Total annual family expenses, \$1,980. Four men saved \$870 during the year. Three have money at interest, amounting to \$375. Three own homes valued at \$3,100. Of those owning homes all are mortgaged for the sum of \$1,575. Two rent and pay \$19 per month, an average of \$9.50. Three families own sewing machines; 1 person has a guitar, 1 a banjo and 1 a harp. Nine take newspapers: 9 dailies, and 2 weeklies. Nine board and pay \$33.50 per week, an average of \$3.72. One has his life insured for \$3,000. None belong to benefit societies. All had good health when they began work. Present state of health: 20 good, 2 fair. One cannot read and 2 cannot write. One is subject to loss of wages by error, waste or breakage. One is required to exercise more than ordinary care to prevent accidents. Three reported wages decreased during the past 5 years, 5 increased, 6 the same, 1 did not answer, and 7 are boys under 16 years of age. Thirteen pay cash when they purchase goods, 1 cash and credit and 8 did not answer. None keep an itemized account of their expenses. Eleven say that they are as well off as they were 5 years ago, 2 are not, 1 is better off, and 1 did not answer, and 7 are boys under 16 years of age.

MICHIGAN CHAIR AND FURNITURE CO.

No report was received from this firm. Number of employes canvassed by this bureau, 20. Nationality: Americans, 5; Germans, 14; Canadians, 1. Parentage of

those born in the United States: American, 2; German, 8. Two are married, 17 are single, and 1 a widower. There are 2 children in the families, and none attend school. Eighteen of the employees support themselves only, while 2 support, other than themselves, 2 persons. Total number of months employed during the year, 206, an average of 10.8. During the year 5 men lost time amounting to 546 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$4,487. Total annual family expenses, \$661. Fifteen live at home and give wages to parents. Two men saved \$600 during the year. Two have money at interest amounting to \$325. One owns a home valued at \$4,000. One pays \$5 a month rent. One family owns a sewing machine, 1 person has a piano and 2 guitars. Four take newspapers: 3 dailies and 2 weeklies. Three board and pay \$11 per week, an average of \$8.66. One carries a life insurance of \$5,000, and 1 belongs to a benefit society, and in case of sickness receives \$15 a week. All had good health when they began work, and all have good health now. Two cannot read or write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents. Two reported a decrease of wages during the past 5 years, 1 an increase, 1 the same, 6 did not answer, and 10 are boys under 16 years of age. Six pay cash when they purchase goods, and 14 did not answer. One keeps an itemized account of his expenses. Seven are as well off as they were 5 years ago, 8 are not, and 10 did not answer.

WOLVERINE MANUFACTURING CO.

No report was received from this firm. Number canvassed by this bureau, 19. Nationality: Americans, 12; Germans, 8; Irishmen, 1; Canadians, 8. Parentage of those born in the United States: American, 2; German, 5; Irish, 3; English, 1; Belgium, 1. Five are married, and 14 are single. There are 15 children in the families, of which 6 attend school. Fourteen employees support themselves only, while 5 support, other than themselves, 18 persons. Total number of months employed during the year, 195½, an average of 10.2+. During the year 12 men lost time amounting to 851 days. Nine of the men work 9 hours and 10 work 10 hours. All are paid semi-monthly and in cash. Total annual earnings, \$8,192. Two of the foreigners had \$60 upon arrival in this country and 1 has sent \$20 to relatives in the old country. Three employees paid \$35 for working tools during the year. Total annual family expenses, \$2,478. Six of the employees live at home and give their wages to their parents. Three men saved \$425 during the year. Three own homes valued at \$3,600. Of those owning homes 2 are mortgaged for \$1,150. Four rent and pay a monthly rental of \$32, an average of \$8. Four families own sewing machines; 1 person has a banjo, 1 a guitar, and 1 a guitar and banjo. Thirteen take newspapers and magazines: 8 dailies, 7 weeklies and 1 monthly. Seven board and pay \$28 per week, an average of \$4. Six carry a total life insurance of \$8,500. Five belong to benefit societies, representing a weekly sick benefit of \$27, an average of \$5.40. All had good health when they began work. Present state of health: 18 good and 1 fair. All can read and write. One is subject to loss of wages by error, waste or breakage. Four are required to exercise more than ordinary care to prevent accidents. Six reported a decrease of wages during the past 5 years, 5 an increase, 3 the same, 4 did not answer, and 1 is a boy under 16 years of age. Fourteen pay cash when they purchase goods, 1 cash and credit, 1

buys on credit, 3 did not answer. One keeps an itemized account of his expenses. Thirteen are as well off as they were 5 years ago, 5 are not, and 1 is a boy under 16 years of age.

RUDOLPH BOLTZ.

No report was received from this firm. Number of employes canvassed by this bureau, 14. Nationality: Americans, 5; Germans, 9. Parentage of those born in the United States: German, 5. Five are married and 9 are single. There are 11 children in the families, of which 3 attend school. Nine of the employes support themselves only, while 5 support, other than themselves, 18 persons. Total number of months employed during the year, 159½, an average of 11.8+. During the year 4 men lost time amounting to 221 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$4,742. One of the foreigners had \$100 upon arrival in this country, and 2 have sent \$105 to relatives in the old country. Five men paid \$46 for working tools during the year. Total annual family expenses, \$2,428. Seven of the employes live at home and give their wages to their parents. Two men saved \$80 during the year. Two own homes valued at \$2,600. Of those owning homes, 1 is mortgaged for \$400. Three rent and pay a monthly rental of \$12.50, an average of \$4.16. Five families own sewing machines; 1 person has a guitar and 1 a violin. Seven take newspapers: 4 dailies and 3 weeklies. One boards and pays \$4.00 per week. Two carry a total life insurance of \$4,000. Three belong to benefit societies, and represent a weekly sick benefit of \$14 per week, an average of \$4.66. All had good health when they began work, and all have good health at the present time. All can read and write. None are subject to loss of wages by error, waste or breakage. Two are required to exercise more than ordinary care to prevent accidents. Two reported a decrease of wages during the past five years, 5 an increase, 1 the same, 8 did not answer, 3 are boys under 16 years of age. Three pay cash when they purchase goods, 2 cash and credit, and 9 did not answer. None keep an itemized account of their expenses. All are as well off as they were five years ago.

CHAS. FLACH,

Manufacturer of medium and high grade furniture. Total wholesale value of goods manufactured during the past fiscal year, \$7,581. Number of employes, 14. Total amount of wages paid during the past fiscal year, \$5,404. Number of employes canvassed by this bureau, 13. Nationality: Americans, 5; Germans, 8. Parentage of those born in the United States: All German. Five are married, 7 single and 1 a widower. There are 9 children in the families, of which 4 attend school. Six employes support themselves only, while 7 support, other than themselves, 12 persons. Total number of months employed during the year, 136½, an average of 10.5. During the year 2 men lost time amounting to 195 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$4,400. Seven of the employes paid \$270 for working tools during the year. Total annual family expenses, \$2,464. Five employes live at home and give their wages to their parents. Three men saved \$285 during the

year. One man has \$100 at interest. Two own homes valued at \$2,200. Of those owning homes 1 is mortgaged for \$500. Three rent and pay a monthly rental of \$19.50, an average of \$6.50. Two families own sewing machines; 1 person has an organ and flute, 1 a guitar, 1 a violin, and 1 a melodeon. Six take newspapers: 5 dailies, and 3 weeklies. Two board and pay \$6.50 per week, an average of \$3.25. One belongs to a benefit society, representing a weekly sick benefit of \$5. Twelve had good health when they began work, and 1 did not answer. Present state of health: 12 good, and 1 did not answer. All can read and write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents. Three reported an increase of wages, 7 the same, and 3 did not answer. Seven pay cash when they purchase goods, 1 buys on credit, and 5 did not answer. None keep an itemized account of their expenses. Eleven are as well off as they were 5 years ago, and 2 are not.

SUMMARY FOR DETROIT.

Fifteen factories were canvassed in Detroit. To our request for the wholesale value of goods manufactured during their fiscal year, the total number of employes and the total amount of wages paid, the following eight firms failed to make returns to this bureau: Hargreaves Manufacturing Co., C. D. Widman & Co., Wm. Wright, Hunt, Craine & Co., Michigan Chair & Furniture Co., Wolverine Manufacturing Co., and R. Boltz. The following firms gave the desired information: M. J. Murphy & Co., F. Posselius & Bros., C. H. Haberkorn & Co., Aertz, Meyers & Kirchberg, Gray & Baffy, Denizer Furniture Co., and Chas. Flach. The 7 firms last enumerated had 788 employes upon their pay roll upon the first pay day in May, 1889. The total wholesale value of goods manufactured during their fiscal year was \$749,167. The total amount of wages paid was \$211,847, amounting to \$268.20 per capita (man, boy and girl) per year. The wages paid amounted to .28+ per cent of the wholesale value of the goods produced.

In the 15 factories the special agents of this bureau made a canvass of 679 men and boys and 169 girls. The canvass of the men and boys resulted as follows: Nationality: Americans, 291; Hollanders, 1; Swedes, 1; Germans, 278; Polanders, 80; Scotchmen, 1; Russians, 1; Englishmen, 18; Canadians, 36; Frenchmen, 8; Austrians, 2; Irishmen, 8; Belgians, 15; Brazilians, 1; Swiss, 1; Italians, 2. Of the employes .57+ per cent are foreign born. Parentage of those born in the United States: American, 45; Holland, 1; German, 177; English, 18; Irish, 17; Polish, 10; Canadian, 2; Scotch, 7; Austrian, 1; French, 6; Norwegian, 1; Belgian, 4; Swiss, 2. Of the 291 employes who are reported as having been born in the United States, .84+ per cent had foreign parents.

Of the total number of employes canvassed 233 are married, 5 are widowers and 441 are single; .85+ per cent of the employes are married (including the widowers as having families). There are 572 children in the families, of which number 177 attend school. Four hundred and nine employes support themselves only, while 270 support other than themselves, 793 persons. Total number of months employed during the year, 7,097 $\frac{1}{2}$, an average of 10.4+; 388 employes lost time during the year amounting to 21,439 days. All of the factories work 10 hours a day. All pay their employes in cash. All pay weekly except Hargreaves Manufacturing Co., F. Posselius & Bros., C. H. Haberkorn & Co., Aertz, Meyers & Kirchberg, Denizer Furniture Co., Wolverine Manufacturing Co., and R. Boltz, who pay semi-monthly. The total annual earnings are \$249,874, amounting to \$368 per capita (man and boy) per year. Of the foreigners 41 are not naturalized. Sixty-five had money upon arrival in the United States, amounting to \$3,998.50. Thirty-four have sent money to relatives and friends in the old country amounting to \$1,683; .26+ per cent of the foreigners had money upon arrival in this country. One hundred and twenty-six of the employes paid \$1,295.65 for working tools. Total annual family expenses, \$119,571, amounting to \$112.58 per capita. Two hundred and forty-eight of the employes live at home and give their wages to their parents, which is .36 per cent of the employes.

One hundred and five saved \$12,189 during the year, which included payments upon homes; .11+ per cent of the employees saved money. Only .04+ per cent of the total annual earnings were saved. Eighty have money in the savings banks or at interest amounting to \$12,090. One hundred and twenty-three own homes valued at \$163,400.

Of the employees 19 years of age and over, .80+ per cent own homes. Seventy of those owning homes are mortgaged for a total of \$39,595. One hundred and thirty-two rent and pay a total monthly rental of \$998.25, an average of \$7.56. The total annual rent amounts to \$11,979, an average of \$90.75. The per cent of rent to annual earnings is .17+, and the per cent of rent to family expenses is .17+. Of the families, .51 per cent rent. One hundred and fifty-six families own sewing machines, which is .65+ per cent. Twelve employees own organs, 7 pianos, 1 a melodeon, 27 guitars, 9 banjos, 2 cornets, 4 horns, 2 flutes, 3 clarionets, 8 accordions, 3 zithers, 29 violins, 2 harps, and 1 a bass viol; .16+ per cent own musical instruments. Three hundred and sixteen take newspapers and magazines, which is .46+ per cent of the whole number of employees. Two hundred and fifty-two daily papers are taken: 164 weeklies, and 25 monthlies. One hundred and seventy-two board, which is .25+ per cent of the employees. The total weekly cost for board and room is \$608.75, an average of \$8.53. Total annual board, \$35,655. Ninety-nine carry life insurance, which is .14+ per cent of the employees. The total life insurance is \$149,587. One hundred and nineteen belong to benefit societies, which is .17+ per cent of the employees. The total weekly benefit, in case of sickness or accident, amounts to \$874.50, an average of \$7.84. Six hundred and sixty-five had good health when they began work, 6 fair, 1 poor, and 7 did not answer. Present state of health: 635 good, 85 fair, 8 poor, and 6 did not answer. Thirty-one cannot read and 32 cannot write. The question, Are you in favor of 8 hours as a day's work? was asked of 561 employees. The answers were as follows: 439 yes, 64 no, 35 don't know, 8 hardly know, 7 don't care, 7 can't say, 1 won't say, 1 immaterial, 8 all the same, and 1 can't tell. Only 7 are subject to loss of wages by error, waste or breakage, 646 are not, and 26 did not answer. Eighty-eight are required to exercise more than ordinary care to prevent accident to themselves or others, 519 are not, and 72 did not answer. Ninety-five reported a decrease of wages during the past five years, 159 an increase, 175 the same, 93 did not answer, 148 are boys under 16 years of age, and 9 have been in this country less than one year.

Those who reported a decrease gave as a reason: Seven competition, 21 gave no reason, 1 emigration, 8 change of work, 8 surplus labor, 1 change of position, 3 too many children, 1 can't tell, 5 over production, 1 child labor, 1 machinery and girls, 1 too many girls, 4 don't know, 1 monopoly and emigration, 1 too many at business, 1 change of location, 8 too many people, 1 too many workers, 1 more people, 1 slack work, 8 cut down, 6 machinery, 1 poor times, 2 too many Canadians, 1 prison work, 1 supply of labor is greater, 1 cut down 10 per cent, 3 foreign labor, 1 no work to do, 1 employers want more profit, 1 more laborers, 1 over supply, 1 wages generally lower, 1 too many hours, 3 less wages, 1 monopoly and machinery, 1 had more work.

Those who reported an increase of wages gave as a reason: Ten gave no reason, 64 more experience, 1 change of work, 7 promotion, 1 change of occupation, 2 business better, 1 change of position, 26 older, 18 experience, 1 worked for firm longer, 1 greater demand, 8 different position, 1 higher wages, 1 gives me more, 1 worked myself up, 1 got a raise, 1 larger trade, 1 longer at trade, 2 worth more, 5 change of country, 2 strike of 1886 raised wages, 1 got a contract, 8 longer in this country, 1 worked only short time at trade, 2 different work, 1 longer with firm, 1 increase of business. Four hun-

dred and twelve pay cash when they purchase goods 25 both pay cash and buy on credit, 30 buy on credit, and 212 did not answer the question.

Twenty-one keep an itemized account of their expenses, 439 do not, and 219 did not answer the question. Four hundred and fifty are as well off as they were 5 years ago, 59 are not, 5 are better off, 8 did not answer, 148 are boys under 16 years of age and 9 have been in this country less than one year. Those who are not as well off as they were five years ago gave as a reason : 3 financially, 10 lower wages, 7 sickness, 18 gave no reason, 1 failed in business, 1 sickness and in all respects, 2 in debt, 1 lost property, 1 lost money, 1 lost home, 1 unsteady work, 1 in business then, 1 can't give a reason, 1 less work, 1 loss of home and sickness, 1 wife died, 1 only work 9 months where I used to 12, 1 lost money I had in bank, 1 lost money in farm, 1 injured, 1 have to support mother, 1 I can't get steady work, 1 not enough work and failure in business, 1 too many children, 1 can't get work enough and lost home, 1 lost home worth \$3,000 and sickness, 1 sickness and financially, 1 had money and did not have to work, 1 lost \$3,000.

Among the employes canvassed in Detroit were 169 girls; 180 with M. J. Murphy & Co., 18 with the Hargreaves Manufacturing Co., 12 with C. D. Widman & Co., 5 with Gray & Baffy and 4 with Hunt, Craine & Co. Nationality: American, 85; Holland, 2; German, 58; Poland, 17; Scotland, 1 England 1; Canada, 10. Of the girls, 49+ per cent are foreign born. Parentage of those born in the United States: American, 5; Holland, 2; German, 60; English, 2; Irish, 3; Polish, 7; Canadian, 1; Scotch, 3; French, 1; Swiss, 1. One hundred and sixty-eight are single and 1 a widow with one child. One hundred and sixty-six support themselves only, while 3 support 3 persons. Total number of months employed during the year, 1,650+, an average of 9.7+. One hundred and twenty-three girls lost time during the year amounting to 4,966 days.

The total annual earnings is \$26,005, amounting to \$153.87 per capita, or \$2.95 per week. All work 10 hours per day and are paid in cash. Total annual family expenses, \$767. One hundred and forty-two live at home and give their wages to their parents, which is .84 per cent of the girls. Five saved \$380 during the year, and 5 have \$435 at interest. One owns a house and lot valued at \$1,000. Three rent and pay a monthly rental of \$14 an average of \$4.66. Two own sewing machines, 8 organs, 8 pianos, 2 guitars, 1 a zither, 1 a harp. Nineteen take newspapers and magazines: 12 dailies, 12 weeklies, and 1 monthly. Sixteen board and pay \$30.75 per week, an average of \$1.92. One hundred and sixty-seven had good health when they began work, 1 fair, and 1 did not answer. Present state of health: One hundred and fifty-one good, 12 fair and 6 poor. Seven cannot read and 7 cannot write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents to themselves or others. Five reported a decrease of wages during the past 5 years, 9 an increase, 10 the same, 58 did not answer, 89 are girls under 16 years of age, and 8 have been in this country less than one year. Those who reported a decrease of wages gave as a reason: 3 wages cut down, 1 firm won't pay as much, and 1 gave no reason. Those who reported an increase of wages gave as a reason: 1 change of work, 1 promotion, 1 am older, 3 more experience, 2 worked for firm longer, 1 more to attend to. Twenty-two pay cash when they purchase goods, 1 cash and credit and 146 did not answer. None keep an itemized account of their expenses. Sixty-seven are as well off as they were 5 years ago, 10 are not, 89 are girls under 16 years of age, and 8 have been in this country less than one year. Those who are not as well off gave as a reason: 1 lower wages, 2 sickness, 2 poor health, 1 father is sick, 1 lost my father, 1 my work earned more, 1 father can't get work.

**FURNITURE
MANUFACTURING INDUSTRY**

CANVASSED IN

THE CITIES AND VILLAGES OF THE STATE

OUTSIDE OF

GRAND RAPIDS AND DETROIT.

TABLE No. 17.—Showing Individual Reports of the Employees in the Furniture Grand Rapids

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
ETREY MANUFACTURING CO., OWASSO.													
Finisher	14	Germany	Germany	s	1	0	0	1	1	11	26	no work	\$3 50 w
Packer	34	"	"	m	1	0	0	7	7	11	26	"	9 00
Shipping clerk	29	New York	U. S.	m	1	0	0	4	4	12	"	"	58 33 m
Finisher	44	Mass.	"	m	3	1	0	13	6	9	50	no work	8 50 w
"	19	Michigan	Germany	s	"	"	"	2	3	11	26	"	9 00
Packer	41	Ohio	U. S.	m	0	0	0	1	1	12	"	"	7 50
Machine hand	39	Canada	Canada	m	0	0	0	1	1	10	39	no work	7 50
"	27	Michigan	U. S.	m	1	0	0	12	10	11	13	laid off	8 00
"	43	New York	"	m	1	0	0	12	3	12	"	"	7 50
"	34	Vermont	"	m	3	2	0	24	5m	9	78	no work	7 10
Cabinet-maker	27	Canada	Canada	s	"	"	"	5	2	12	"	"	9 00
"	32	New York	U. S.	m	3	0	0	19	2	11	13	no work	11 00
"	31	Michigan	Ireland	s	"	"	"	1	1	12	"	"	9 00
"	23	"	U. S.	s	"	"	"	2	1	10	33	no work	9 10
"	50	"	Germany	m	1	1	0	2	2	11	20	"	9 00
Packer	21	New York	U. S.	s	"	"	"	1	1	9	78	"	6 00
Finisher	16	Germany	Germany	s	"	"	"	4	4	12	"	"	4 50
"	60	"	"	m	5	2	0	7	5	11	19	no work	6 10
Machine hand	15	"	"	s	"	"	"	1	1	11	19	"	2 50
"	18	Michigan	U. S.	s	"	"	"	6	6	11	26	sickness & no w'rk	9 00
"	17	Illinois	"	s	"	"	"	3	3	11	"	no work	5 00
Finisher	24	Germany	Germany	s	0	0	0	1	1	10	39	"	8 00
Machine hand	18	Michigan	U. S.	s	"	"	"	2	2	11	26	sick and no work	8 00
Finisher	19	Penn.	"	s	"	"	"	6w	6w	11	6	no work	4 00
Cabinet-maker	32	New York	"	w'r	2	1	0	7	7	12	"	"	11 40
Foreman filler	34	Ohio	"	m	3	1	0	17	8	12	"	"	13 50
Teamster	49	Ireland	Ireland	m	1	0	0	2	1	8	104	no work	9 00
Machine hand	33	New York	U. S.	m	2	1	0	13	5	12	"	"	8 00
Carver	28	"	"	m	0	0	0	1	1	11	13	no work	7 50
Laborer	55	England	England	m	2	1	0	4	4	11	13	"	7 50
"	18	Germany	Germany	s	"	"	"	2	2	7	130	"	5 00
Cabinet-maker	25	Ohio	U. S.	s	1	0	0	4	4	11	13	"	7 50
Machine hand	33	Canada	Canada	m	3	0	0	3	3	11	13	"	6 75
Cabinet-maker	41	New York	U. S.	w'r	4	3	0	5	5	11	13	sick and no w'rk	10 00
Laborer	34	Germany	Germany	m	2	2	0	6	6	11	26	no work	7 50
Finisher	16	Michigan	U. S.	s	"	"	"	3	3	11	19	no work	7 50
Book-keeper	36	"	"	m	0	0	0	12	4m	10	39	sickness	50 00 m
Cabinet-maker	2	"	"	m	0	0	0	6	6	11	26	no work	10 00 w
"	25	Ohio	Germany	s	0	1	0	1	1	10	52	sick and no w'rk	9 00
Machine hand	25	Michigan	"	m	2	0	0	6	3	12	"	"	10 00
Cabinet-maker	38	Germany	"	m	7	4	0	22	8	11	19	no work	11 00
Machine hand	32	"	"	m	1	0	0	7	7	9	59	"	9 00
"	44	New York	U. S.	m	10	0	0	12	2	6	166	sickness	7 00
Finisher	34	Germany	Germany	s	"	"	"	3w	3w	11	"	first w'rk in U.S.	3 50
Truck man	45	"	"	m	3	3	0	20	3	11	26	no work	6 00
Carver	16	Michigan	U. S.	s	"	"	"	2	2	10	52	"	1 50
Laborer	32	Germany	Germany	s	3	0	0	4	4	11	26	sick and no w'rk	7 25
Millwright	54	Vermont	U. S.	m	3	1	0	13	13	12	"	"	13 00
Fireman	38	Michigan	"	m	4	3	0	12	7	12	"	"	18 50
Night-watch	48	New York	"	m	1	0	0	1	1	12	"	"	7 50
Finisher	19	Indiana	"	s	"	"	"	8m	8m	11	26	no work	5 00
Trucker	32	Germany	Germany	s	3	3	0	4	4	11	26	"	7 50
"	18	Michigan	U. S.	s	"	"	"	5w	5w	12	"	"	6 00
Carver	26	Vermont	"	m	1	0	0	6	8	12	"	"	16 50

Manufacturing Industry canvassed in the Cities and Villages of the State outside of and Detroit.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$167			*	0	no			no	none		*				18
429	0	\$354	\$75	0	no	\$300		no	yes	1					9
700		550	150	0	1,200			no	no	1					14
359		359	0	0	no		\$6 00	no	no	3					18
429			0	0				no	no		\$3 25				15
390		390	0	0	5,000			yes	no	1	2				17
341	0	341	0	0	no		5 90	no	no						18
299			50	0	no		7 00	yes	no	1	1	8 50			15
300		300	0	0	"			no	no	1	1				17
202		202	0	0	1,400	250		yes	no	1		2,000			10
468			50	0	no			no	no		8 50				18
548		448	100	0	1,200	700		yes	no	1		2,000			18
468			0	\$700	no			no	no	1	8 50				16
419			0	0	no			no	no	1	3 50				20
439		439	0	0	800	235		yes	organ	2					29
234			50	0	no			no	none		3 00				18
234	0		*	0	no			no	no	1	*				5
292	0	292	0	0	600	300		no	no	2					15
122			38	25	no			no	no		1 25				13
439			0	0	no			no	no		3 00				12
238			25	0	"			no	no		8 00				13
364		284	80	0	800	400		no	no	1					19
143			0	0	no			no	no		2 00				14
204			0	0	no			no	no	1	2 50				16
563		563	0	2,000	1,200	300		no	no	3	2				15
702		602	100	500	no		11 00	yes	no	1	1				17
312		312	0	0	"			no	no	1	1				15
416		400	0	0	"		6 00	no	organ	1	1				8
374		374	0	0	"			no	none	1	†				14
374		374	0	0	2,000			no	no	2		2,000			19
152			0	0	no			no	no	1	8 00				16
374		280	100	0	700			no	no	1					20
336	\$100	220	116	0	600	25		yes	no	1	1				12
498		400	35	0	1,200	200		no	organ	1	1	1,000	1	25 00	22
357	0	357	0	0	300	100		no	none	1					14
396			0	0	no			no	no		2 50				18
525		525	0	0	1,200			yes	organ	1	2	2,000			17
477		377	100	0	no			no	no	1					15
390			0	0	no			no	no	1	3 50				13
670		450	200	0	1,200	400		yes	organ	1	1				18
536	0	430	50	0	800			no	no	1					15
380	150	380	0	0	900	500		no	no	1		500			14
182		182	0	0	1,200	800		no	no	1	1				11
15	0		0	0	no			no	no		3 50				14
236	1,500	236	0	0	1,000	800		yes	no	1					6
65			*	0	no			no	no		*				18
343	50	271	75	0	800			yes	no						12
676		676	0	0	no		6 00	no	no	1					17
702		600	100	0	1,000			no	organ	2		2,000			14
390		280	100	0	800	300		no	no	2		7,500	1	10 00	14
233			25	0	no			no	no		2 00				15
357		257	100	0	800	100		no	no	2					16
312			100	0	no			no	no		3 00				16
458		500	0	0	900	200		yes	no	1	1	2,000			16

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.
Machine hand	27	Michigan	Germany	s	0	0	0	5
"	29	"	U. S.	m	0	0	1	9
"	44	Penn.	Canada	w'r	1	0	0	11
Finisher	19	Germany	Germany	s	0	0	0	5
"	23	New York	"	m	1	0	2	3
"	18	Michigan	U. S.	s	0	0	0	2
Laborer	24	Germany	Germany	m	3	1	4	3
Carver	15	Kansas	U. S.	s	0	0	0	2
Laborer	22	Michigan	"	m	2	0	3	1m
"	40	U. S.	"	s	0	0	0	10
Machine hand	38	Michigan	"	s	0	0	3	3
Finisher	19	"	"	s	0	0	0	2
Machine hand	25	"	"	m	2	0	3	3
"	30	Canada	Canada	s	0	0	0	3
"	23	Michigan	U. S.	m	3	0	4	3½
"	49	"	"	m	2	1	3	4
Laborer	43	"	"	m	3	0	4	1
"	17	"	"	s	0	0	0	10m
Finisher	30	Germany	Germany	m	3	0	4	3
Laborer	14	Michigan	U. S.	s	0	0	0	4m
"	15	"	"	s	0	0	0	1
Glazier	32	Canada	England	m	0	0	1	7
Finisher	23	Ohio	U. S.	s	0	0	0	3
Machine hand	32	Michigan	"	m	1	1	2	1½
"	25	"	"	s	0	0	0	9
Carver	18	"	"	s	0	0	0	2
Cabinet-maker	26	New York	"	s	0	0	0	2
"	20	Michigan	"	s	0	0	0	3m
Finisher	17	Germany	Germany	s	0	0	0	4m
"	22	"	"	s	0	0	5	3
"	50	Austria	Austria	m	0	0	1	5
Machine hand	44	Michigan	U. S.	m	4	2	6	10
Sand-paperer	18	"	Germany	s	0	0	0	2
Machine hand	14	"	U. S.	s	0	0	0	1
"	14	"	Germany	s	0	0	0	10w
"	39	New York	England	m	1	1	2	3
"	17	"	U. S.	s	0	0	0	5
Packer	22	Michigan	"	s	0	0	0	3
Laborer	16	"	"	s	0	0	0	10m
Machine hand	43	New York	"	m	3	1	4	3
Carver	45	Nova Sco.	Scotland	m	3	2	4	2
"	18	Michigan	U. S.	s	0	0	0	1½
Teamster	32	Germany	Germany	m	1	0	2	3
Machine hand	39	Mass.	Ireland	m	3	2	4	13
"	31	Michigan	U. S.	m	2	0	2	1
"	23	"	Germany	m	3	0	4	9
Laborer	14	"	U. S.	s	0	0	0	5m
Machine hand	31	"	"	m	1	0	2	21
Cabinet-maker	30	New York	Germany	m	4	2	5	4
"	30	"	"	m	2	1	3	3
Machine hand	37	"	U. S.	s	0	0	0	5
"	14	Missouri	"	s	0	0	0	1m
Cabinet-maker	53	New York	"	m	0	0	1	¾
"	40	Michigan	"	m	3	3	4	7m
Machine hand	23	"	"	m	1	0	2	3

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$438			0	0	no			no	none	Daily papers.	Weekly papers.	Magazines.	\$3 50				22
548		\$380	\$140	\$200	no		\$8 00	yes	"	1	1						18
325			100	0	\$700	\$250		no	"	1	1		\$3 50				10
368			*	0	no			no	"	1	1		*				14
390		380	0	0	900			yes	"	1	1						18
280			0	0	no			no	"				1 50				15
366	\$20	366	0	0	800	175		"	"		1						25
134		*	0	0	no			"	"				*				13
312		212	100	1,500	"		6 00	yes	"	1	2			\$1,200			12
280			50	0	1,000			no	"	1	2		8 50				10
318		318	0	0	no		10 00	yes	"								23
110			0	0	"			no	"				2 00				15
687		687	0	0	"		7 50	yes	"	1	1			800	1	\$20 00	12
442			150	0	900	500		no	"				2 50	8,000	1	15 00	17
423		423	0	0	no		7 00	yes	"	1							19
448		848	100	0	"		8 00	"	organ		1	1					18
325		325	0	0	500	300		"	"		1						25
130			81	0	no			no	none				†				14
429		329	100	0	700	200		yes	"	1	3						14
48		*	0	0	no			no	"	1			*				13
104			*	0	"			"	"				*				13
549		449	100	0	"		8 00	yes	"	1				1,000			20
328			0	0	"			no	"	1	1		4 00				14
226		226	0	0	800			yes	organ								15
278			0	0	no			no	none		1		4 00				15
173			*	0	"			"	"		1						13
468			78	0	"			"	"		1		3 50				24
254			0	50	"			"	"		1		3 00				14
45	0		0	0	"			"	"				2 00				14
292		292	0	0	"			"	"		1			500	1	3 00	14
156	100	156	0	0	500	150		yes	"			1					20
341		841	0	0	no		8 00	"	"								10
191		*	0	0	"			no	"	1			*				14
103		*	0	0	"			"	"		1		*				13
27		*	0	0	"			"	"				*				12
454		404	50	0	1,000	450		yes	"		2						16
331		*	0	0	no			no	"				*				12
364		*	0	0	"			"	"				4 25				12
149		*	0	0	"			"	"				*				12
407		407	0	0	"		8 00	yes	"		1		*				18
614		614	0	0	1,500			"	"		2						15
152			50	0	no			"	"	1	1		†				14
367	0	282	75	0	700	300		yes	"	1	1			500	1	5 00	14
407		407	0	0	800	96		"	organ		1			2,000			14
273		273	0	0	no		8 00	no	none		1						14
429		429	0	0	1,200	400		yes	organ		2			5,000			20
35		*	0	0	no			no	none				*				13
520		400	120	0	900	250		yes	"	1	1						10
296	0	296	60	0	500	225		"	"		1						10
572		420	150	500	1,800			"	organ		1						15
349			75	0	no			no	none		2	1	3 50				10
104			0	0	"			"	"	1	1		†				12
367		367	0	0	800	450		yes	organ		1						21
474	0	474	0	0	850	600		"	"	1	1						20
334		334	0	0	no		3 00	no	none	1							13

* Gives wages to parents and lives at home. † Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	school.	How many depend on you for support.	No. of years at present occupation.	Wages received.
Cabinet-maker.	28	New York.	U. S.	s	—	—	1	8	\$10 80
Finisher.	54	Germany.	Germany.	m	—	1	3	4½	8 00
Laborer.	34	England.	England.	m	8	—	4	7	7 50
Machine hand.	42	Ohio.	U. S.	m	0	0	1	15	13 80
Finisher.	29	Germany.	Germany.	s	—	—	0	2	7 50
Machine hand.	13	Michigan.	U. S.	s	—	—	0	1½	2 00
Laborer.	41	Germany.	Germany.	s	—	—	0	2	7 50
Engineer.	39	Michigan.	U. S.	m	8	8	4	24	12 00
Machine hand.	26	"	"	m	2	1	8	15	9 00
"	20	New York.	"	s	—	—	0	4	12 00
Finisher.	27	Michigan.	"	m	0	0	2	1½	6 00
Cabinet-maker.	21	"	"	s	—	—	0	9	7 50
Packer.	23	"	"	m	1	1	2	3	9 00
Trimmer.	14	Germany.	Germany.	m	1	1	2	6	9 00
Machine hand.	42	New York.	U. S.	m	8	4	9	2	7 00
Cabinet-maker.	20	Michigan.	"	s	—	—	0	5	6 00
Trucker.	25	Germany.	Germany.	m	2	2	2	3	6 00
Machine hand.	25	Vermont.	U. S.	m	0	0	1	12	9 50
Trimmer.	21	Michigan.	"	m	0	0	1	2	9 00
Cabinet-maker.	57	Vermont.	"	m	4	1	5	6	8 50
Fireman.	31	New York.	Germany.	m	0	0	1	12	10 00
Finisher.	37	Germany.	"	m	6	2	3	3	6 00
"	16	Canada.	Canada.	s	—	—	0	1	8 00
Laborer.	33	Michigan.	U. S.	w'r	8	3	4	1	7 50
Finisher.	66	Germany.	Germany.	m	0	0	1	3	6 00
Cabinet-maker.	21	Ohio.	U. S.	s	—	—	0	8m	7 00
Finisher.	26	Scotland.	Scotland.	m	6	3	7	15	18 00
"	47	New York.	U. S.	m	6	3	7	3	6 00
"	26	Penn.	"	m	1	1	2	5	9 00
Cabinet-maker.	36	New York.	"	m	2	1	3	3	8 00
Carver.	16	Michigan.	England.	s	—	—	0	½	1 50
Laborer.	42	Germany.	Germany.	m	1	0	2	10	9 00
Finisher.	34	"	"	m	5	3	6	6	6 00
Machine hand.	47	England.	England.	m	4	1	5	8	8 00
Finisher.	16	Michigan.	U. S.	s	—	—	0	1m	2 50
"	30	Germany.	Germany.	m	0	0	1	10	10 00
"	60	"	"	m	0	0	1	4	6 00
Laborer.	30	"	"	m	1	1	2	2	7 50
"	24	"	"	s	—	—	0	½	6 00
Fireman.	22	Canada.	Scotland.	m	0	0	1	10m	8 00
Finisher.	52	Michigan.	U. S.	m	3	0	5	6	10 50
Laborer.	32	New York.	Scotland.	m	1	0	1	3	9 50
Cabinet-maker.	21	Germany.	Germany.	m	0	0	1	3	6 00
"	26	"	"	m	6	2	6	3	8 00
Finisher.	39	"	"	m	2	0	3	9	9 00
Cabinet-maker.	25	Canada.	Ireland.	m	1	0	2	3	7 50
Machine hand.	59	New York.	U. S.	m	0	0	1	15	8 50
Fireman.	26	Michigan.	"	w'r	0	0	0	1½	7 50
Machine hand.	56	Mass.	"	m	2	2	8	25	10 80
"	22	Canada.	Canada.	s	—	—	0	2	9 00
Carver & turner.	50	Ohio.	U. S.	m	3	2	4	30	19 00
Cabinet-maker.	54	Germany.	Germany.	m	1	0	2	4	2 00

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$191		\$291	\$200	\$400	\$1,300			no	none			\$2,000			14
548	0	471	75	0	450			yes	"						16
325	0	325	0	0	1,800			yes	"						18
673	0	673	0	0	1,600	\$500		no	organ	1					12
306	0		0	0	no			no	none	1		\$3 00			14
97		*		0	"			"	"			*			11
374	\$75		75	0	"			"	"			3 00			9
611		465	100	0	750	100		yes	organ			500	1	\$5 00	13
439		239	200	0	1,500			no	none	2		8 50			19
520			50	0	no			no	none			8 50			15
290		290	0	0	"			"	"	3		+			21
390			0	0	"			"	"			8 00			12
490		415	75	0	"			yes	"	1	2	1,000			16
351	50	301	50	0	800	400		no	"	1	2				15
364		364	0	0	1,000	89		yes	"	1	2				13
364			50	0	no			no	"			8 00			15
211	0	211	0	0	800			"	"	1					7
432		432	0	0	no	390		"	"	1					12
448		448	0	0	1,000	5 00		yes	"	1	2	1			18
414		414	0	0	1,000			yes	"	2					8
530		245	275	0	1,000	550		no	"	2					10
253	150	253	0	0	500			"	"	1					15
78			40	0	no			"	"			+			13
382		382	0	0	500	100		yes	"	1					16
273	15	273	0	0	400			no	"	1					10
311			50	0	no			"	"	1		8 00			16
936		600	800	0	1,500	600		yes	"	1		3,000	1	15 00	17
533		555	0	0	no			yes	"	1					22
880		350	0	0	"	8 00		no	organ	2					23
399		349	50	0	900	275		yes	none	1					20
75			40	0	no			no	"	1		+			15
668		588	100	0	2,000	300		yes	"	1		500	1	5 00	14
286	0	286	0	0	800	250		"	"	1					16
380	1,500	390	0	0	1,400	300		"	"	1					17
178			0	0	no			no	"			1 50			10
509		509	0	0	900	200		"	"	2		500	1	5 00	15
224	250	234	0	0	9 00			"	"	1					26
371	0	344	30	0	700	300		yes	"	1		500	1	5 00	14
305	50		50	0	850			no	"	1		3 00			14
390		390	0	0	1,000	370		yes	"	1					19
535		535	0	0	no	5 00		"	"						11
473		273	200	0	1,200			"	organ	1					15
236	0		0	0	500	400		no	none	1					10
338	0	288	50	0	800	250		"	"	1					15
429	0	260	150	0	2,000	300		yes	"	1		500	1	5 00	3
366	0	226	140	400	no	7 50		"	"	1					10
414		340	74	0	1,900	200		"	"	2		4,000			21
185			0	1,500	no			no	"			2 50			12
526		526	0	0	3,000			yes	piano	1	2	2,000			19
409			0	0	no			no	none	1	1	3 50			20
483		433	0	0	"		10 00	yes	piano	1	1	2,000			20
52	350	53	0	0	1,000	200		"	none	1	1				24

* Gives wages to parents and lives at home.

† Lives at home and pays no stated amount.

TABLE No 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many demand an vote for	Cause for loss of time.	Wages received.
WOODWARD BROS., OWOSSO.									
Machine hand...	29	Michigan.	U. S.	m	9	0		at home	\$1 25 d
Finisher.....	31	New York	"	s				work	15 h
Carver.....	19	Michigan.	England..	s				ation	9 00 w
Shipping clerk..	26	New York	U. S.	m	3	0			15 h
Finish'g Forem'n	32	England..	England..	m	1	0		closed	20 00 w
Cabinet-maker..	25	Canada...	Canada...	m	1	0		work	1 75 d
Carver.....	16	Germany.	Germany.	s					4 50 w
Time keeper....	35	Ohio.....	U. S.	m	2	2			12 00 "
Night-watch....	30	Virginia..	Slaves...	m	0	0			11 00 "
Finisher.....	27	N. J.....	U. S.	m	2	2		swered	15 h
".....	26	Germany.	Germany.	m	1	0			13 "
Cabinet-maker..	41	Canada...	Canada...	m	2	2		swered	12 10 w
".....	15	Michigan.	U. S.	s				ness	8 00 "
Laborer.....	35	".....	".....	m	2	1		work	1 25 d
Finisher.....	27	Canada...	Canada...	s					8 00 w
".....	24	Michigan	U. S.	m	1	0			15 h
Book-keeper....	21	".....	".....	s					65 00 m
Finisher.....	21	".....	".....	s				down	12 h
Cabinet-maker..	25	New York.	".....	m	0	0		ness	1 25 d
Packer.....	25	Germany.	Germany.	m	1	0		work	1 25 "
Laborer.....	62	Ohio.....	U. S.	w'r	0	0		ation	3 80 w
Cabinet-maker..	32	New York.	".....	m	0	0		ation	12 00 "
Carver.....	51	Germany.	Germany.	m	5	3		work	12 00 "
Finisher.....	17	Michigan.	U. S.	s					6 00 "
Teamster.....	30	New York.	".....	m	2	1			7 50 "
Machine hand..	15	Germany.	Germany.	s				swered	2 60 "
Finisher.....	30	".....	".....	s				work	6 00 "
Cabinet-maker..	32	Canada...	Canada...	s				ness	16 h
Machine hand..	33	Michigan.	U. S.	m	0	0			15 "
Finisher.....	23	Germany.	Germany.	s				k in U. S.	5 00 w
Cabinet-maker..	25	".....	".....	m	1	0			15 h
Machine hand..	33	Canada...	Canada...	m	0	0		work	1 25 d
Laborer.....	16	Michigan.	U. S.	s				ation	3 00 w
Machine hand..	34	".....	".....	m	3	3		at home	15 h
Mechanic.....	30	Canada...	Canada...	m	3	1		ness	8 50 w
Cabinet-maker..	19	Michigan.	Germany.	s				work	9 00 "
Finisher.....	19	".....	U. S.	s				dent	7 50 "
Cabinet-maker..	23	".....	".....	m	0	0			10 00 "
Laborer.....	15	".....	".....	s				ness	8 50 "
Finisher.....	20	Germany.	Germany.	w'r	0	0		k in U. S.	6 00 "
Fireman.....	23	Michigan.	U. S.	s				ness	5 00 "
Machine hand..	23	".....	".....	m	0	0		swered	17 h
".....	27	".....	".....	s				ation	15 "
Engineer.....	37	".....	".....	m	2	2		down	13 00 w
Machine hand..	35	".....	Ireland..	m	2	1		swered	13 h
".....	28	Canada...	Canada...	m	1	0		ation	14 "
".....	73	N. H.....	U. S.	w'r	0	0			14 "
".....	51	Michigan.	".....	m	2	0		ness	15 "
".....	37	New York	".....	m	1	1			15 "
".....	28	Michigan.	".....	s				swered	13 "
".....	19	".....	".....	s				work	13 "
Foreman.....	33	".....	".....	m	2	1		closed	2 00 d
Machine hand..	44	".....	".....	m	3	2		swered	15 h
Laborer.....	22	Austria..	Austria..	s					1 25 d
Machine hand..	27	Michigan.	U. S.	s				ation	16 h

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank	Do you own your home, its value.	If mortgaged, for what amount	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$322		\$290	\$25	0	\$1,300			yes	none								21
412			90	0	no			no	"		1		\$3 50				15
439			0	0	no			no	"		1		3 00				18
450		260	115	0	850	\$765		yes	"		2						11
500		475	260	0	no		\$7 00	yes	"	1	1						13
455		455	0	0	"		6 00	"	"	1							16
224			0	0	"			no	"				3 35				12
624		375	200	0	1,000	600		yes	"	1	1						17
572		300	225		900	500		"	organ	1	1						11
215		215	0	0	no		7 00	"	none								15
365	\$350	315	50	0	500			"	"	1	1						16
546	0	400	145	0	2,200			no	organ	1	8	1		\$1,000			16
186			0	0	no			no	none				2 00				13
357		225	75	0	no		6 00	yes	"				3 00				13
238			50	0	"			no	"		1						18
415		415	0	0	"		8 00	yes	"	1	1						14
780			200	0	"			no	"	1	2			1,000			14
302			50	0	"			"	"				2 50				14
319		250	0	0	"		7 00	"	"	1	1						13
300	140	200	100	0	"		4 00	yes	"	1	2						16
140			0	0	"			no	"				3 00				14
572		375	100	48			4 00	yes	organ	1	4			2,000			15
508	0	300	240	0	700			no	none		2	1		2 50			20
234			0	0	no			"	"				2 50				12
390		260	130	0	no		6 00	yes	"		1	1					14
119			*	0	"			no	"				*				13
130	0		0	0	"			"	"		1		3 00				17
350			38	0	"			"	"		1		3 50		1	\$20 00	15
385			0	0	"			"	"				3 50				20
36	0		0	0	"			"	"				3 00				16
372		272	100	0	900	400		"	"	1	1						16
353		297	0	35	no		8 00	"	organ		1						16
153			0	0	"			"	none		1	1		2 50			13
370		370	0	0	850			yes	"	1	1						13
405		405	0	0	550			yes	"								19
390			150	0	no			no	"	1	1		3 00	1,000			14
366			140	0	"			"	"		1		2 50				17
520		360	0	0	"		9 00	yes	"	1	1						14
174			0	0	"			no	"				2 50				13
130	0		0	0	"			"	"				3 00				15
244		200	44	0	"			"	"	1	1						18
450		450	0	0	"		6 00	yes	"	1	2						17
400			0	0	"			no	"		3		3 00				16
661		400	100	0	"		10 00	yes	meld'n	2							11
312		312	0	0	"		5 00	no	none								15
342		300	0	0	"		3 00	yes	"		1						14
360			100	100	2,500			no	"			4	3 00	275			18
325		325	0	0	1,000	295		yes	"								18
375		375	0	0	no		14 00	"	"	1	1		3 00	2,000			20
340			0	0	"			no	"				3 00				15
240			0	0	"			"	"				3 50				12
722		260	300	0	1,200	350		yes	"								14
405		250	68	0	1,000	282		"	"			4					17
324	80		90	0	no			no	"	1	1		3 00				16
343			0	0	"			"	"	1	1		3 50				23

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
ROBBINS TABLE CO., OWASSO.											
Finisher.....	20	Michigan..	U. S.....	W	1	6	1½	10	52	no work	\$6 50 w
Foreman.....	22	"	"	"	0	7	7	12	...	no work	12 00 "
Machine hand..	25	England..	England..	"	0	5	8w	6	155	no work	6 00 "
"	16	Michigan..	U. S.....	"	0	1	1	11	28	"	5 00 "
"	20	"	"	"	3	1	1	11	26	sick and no wrk	6 00 "
Laborer.....	17	Canada...	Canada...	"	0	1½	1	11	28	sickness	3 50 "
Finisher.....	17	Michigan..	Ireland...	"	0	5	1	10	52	no work	5 00 "
Machine hand..	27	"	U. S.....	"	0	3	3	2	200	sickness	6 00 "
"	19	"	"	"	0	1	1	11	28	no work	6 00 "
"	22	New York	"	"	0	6	6	11	28	"	6 00 "
Engineer.....	18	Michigan..	Germany..	"	0	1½	1½	11½	19	"	6 00 "
Machine hand..	14	Germany..	"	"	0	2½	½	11½	12	sick, no work	3 50 "
Cabinet-maker..	19	Michigan..	U. S.....	"	0	5	5	9	78	quit work	5 00 "
Machine hand..	19	"	"	"	0	3	3	11½	12	laid off	5 00 "
Cabinet-maker..	35	New York	"	"	3	15	10	11½	6	sickness, death	13 00 "
Superintendent.	45	"	"	"	5	17	17	12	...	"	10 00 "
GLOBE FURNITURE CO., NORTHEVILLE.											
Molder.....	32	Michigan..	U. S.....	"	3	12	9	11	26	laid off	12 00 "
"	46	New York	"	"	4	20	20	11½	12	"	2 25 d
Teamster.....	43	Michigan..	"	"	3	17	8	12	...	"	1 37 "
Cabinet-maker..	21	"	"	"	0	10	10	12	...	"	2 00 "
Molder.....	58	England..	Scotland..	"	3	12	7	10½	39	laid off	9 00 w
Machine hand..	63	Mass.....	U. S.....	W	1	14	14	11	29	sickness	1 50 d
Cabinet-maker..	24	Canada...	England..	"	0	8	1	12	...	"	1 75 "
Machine hand..	30	Michigan..	U. S.....	"	3	5	5	12	...	"	10 00 w
"	38	Canada...	Canada...	"	3	5	5	12	...	"	1 50 d
Cabinet-maker..	30	New York	U. S.....	"	1	...	2	12	...	"	1 75 "
Laborer.....	20	Michigan..	England..	"	3	2m	2m	12	...	"	1 25 "
"	33	Ohio.....	U. S.....	"	5	2	2	11½	18	sickness	1 25 "
Machine hand..	34	Michigan..	"	"	4	8	10	12	...	"	10 00 w
Laborer.....	33	"	"	"	2	3	3	12	...	"	1 25 d
Machine hand..	18	"	"	"	0	1	2	12	...	"	1 12 "
Upholsterer...	27	"	Germany..	"	2	4	2	12	...	"	1 50 "
Laborer.....	18	"	U. S.....	"	0	1	1	12	...	"	1 00 "
Gluer.....	41	New York	"	"	6	1	1	11½	12	sickness	1 50 "
Turner.....	32	Michigan..	"	"	2	12	12	11½	12	sick and away	10 00 w
Night-watch...	10	"	"	"	4	2	2	11½	12	sickness	10 00 "
Molder.....	51	New York	"	"	3	20	1	11	26	laid off	9 00 "
Machine hand..	32	England..	England..	"	2	5	5	12	...	"	1 75 d
"	36	Michigan..	U. S.....	"	2	5	5	12	...	"	9 00 w
Molder.....	45	"	"	"	3	9	11	11	26	laid off	12 00 "
Machine hand..	23	Canada...	Canada...	"	3	2	5	11½	12	vacation	1 25 d
Finisher.....	22	Scotland..	Scotland..	"	5	3	4	12	...	"	1 25 "
"	50	New York	U. S.....	"	1	31	1	12	...	"	1 50 "
Molder.....	34	Michigan..	"	"	4	12	14	11	26	voluntarily	15 00 w
Machinist.....	20	"	"	"	2	3	4	10	52	accident	10 00 "
Packer.....	45	"	"	"	1	3	3	11½	12	sickness	6 25 "
Gluer.....	26	"	"	"	0	1	1	8	104	"	1 12 d
Cabinet-maker..	33	New York	"	"	1	6	6	12	...	"	1 75 "
Machine hand..	20	Michigan..	"	"	0	5m	5m	12	...	"	1 12½ "
Molder.....	20	New York	England..	"	0	4	4	6	156	traveling	1 25 "
Machine hand..	48	"	U. S.....	"	3	7	7	11	26	sickness	10 00 w
Cabinet-maker..	39	Michigan..	"	"	1	2	2	11½	12	vacation	1 75 d

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
322		222	0	0					organ		1	1					14
224			125	0	\$1,000	\$300	\$9 50	yes	no	1			\$3 50				15
156			0	0	no			no	"				2 00				17
228			0	0	no			"	"				2 50				15
286		286	0	0	"			yes	"	1	1						16
167			0	0	"			no	"	1			2 00				15
217			*	0	"			"	"		1						13
52			0	0	"			"	"				3 00				15
226			0	0	"			"	"	1		1	3 00				14
381			100	0	"			"	"	1	1		3 00				16
222			0	0	"			"	"	1		1	2 00				15
174			*	0	"			"	"				*				13
195			0	0	"			"	"	1			2 50				14
249			0	0	"			"	"				2 00				16
662		662	0	0	1,500	450		yes	organ	1	3						15
520		520	0	0	2,000			"	"	1	6						17
572		522	50	0	900	800		"	none	1	2			\$1,000	2	\$11 00	15
678		350	100	0	2,300	500		"	"	1	1	1		2,000	1	6 00	19
429		300	100	0	no		1 50	no	organ	1							16
624			200	\$500	no			no	none				3 00				14
409	\$100	409	0	0	1,000	600		yes	"	1	3	1		2,000	1	6 00	19
426		329	100	0	1,400	200		"	"	1		1		2,000	1	6 00	15
546	40		0	600	no			no	"		1		3 50		2	11 06	16
520		520	0	0			6 00	yes	"	1							12
468		468	0		"		8 00	"	"		1	1		2,000	1	6 00	19
468		896	150	500	"		8 00	"	organ	1	2			2,000	1	6 00	19
390		290	0	0	"		7 00	"	"		1						14
374		374	0	0	"		4 00	"	none		1	3					19
520		445	75	0	200			"	"		1	1			1	6 00	17
390		265	125	0	1,200	800		"	"		2	1			1	6 00	14
349			0	0	no			no	"				3 00				15
468		343	125	0	950	700		yes	"	1							17
312			0	0	no			no	"				†				17
448		448	0	0	1,100	400		yes	"		1				1	6 00	17
498		348	150	0	1,450	600		"	"	1	3				1	6 00	15
498		398	100	0	1,000	500		"	organ			1	1	1,000			14
429		429	0	0	no		8 00	"	none		2			1,000	1	6 00	17
546	0	250	125	0	1,100	930		"	"	1	2						15
498		368	100	0	600	150		"	"								14
572		472	100	0	1,500	300		"	organ	1	3				1	6 00	20
374		374	0	0	no		7 00	"	none			1					14
390	0	390	0	0	"		6 00	"	"		2			2,000	1	6 00	11
468		368	100	0	2,000			"	"	1	3				2	11 00	19
715		615	100	0	1,000	400		"	organ	1	4	1			2	11 00	12
439		359	75	160	no			"	"	1	2				1	6 00	18
411		411	25	40	600			no	none		2				1	6 00	17
283			0	0	no			"	"		1	1	3 00		1	6 00	15
546		421	125	0	1,400	250		yes	horn	1					1	5 00	12
549			0	40	no			no	none				3 00				17
195			50	0	"			"	"				3 00	3,000			14
477		477	0	0	850			yes	organ	1					1	6 00	16
533		350	100	0	no		9 00	"	"	1	4				1	6 00	14

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE NO. 17.- CONTINUED — *Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Cause for loss of time.	Wages received.
Finisher.....	29	New York	U. S.....	s	1	vacation	\$1 37 d
Cabinet-maker.....	29	Michigan	".....	s	1	person'l busin's	1 50 "
Packer.....	20	Canada	Canada.....	m	1	sickn's & no wrk	1 25 "
Electric plater.....	38	New York	U. S.....	m	1	sickness	1 75 "
Church furn. hand.....	40	Penn.	".....	m	1	.....	10 00 w
Casting finisher.....	18	Michigan	".....	s	1	.....	75 d
Machine hand.....	47	New York	".....	s	1	.....	1 37 "
Cabinet-maker.....	41	Michigan	".....	m	1	.....	10 00 w
".....	31	Canada	England.....	m	1	.....	1 50 d
Molder.....	33	New York	U. S.....	m	1	various causes	10 00 w
Book-keeper.....	30	Michigan	".....	m	1	sickness & vacat'n	10 00 "
Machine hand.....	56	New York	".....	m	1	vacation	8 00 "
Machinist.....	40	"	".....	s	1	sickness	10 50 "
Cabinet-maker.....	34	Michigan	".....	m	1	person'l busin's	1 50 d
Traveling sales'n.....	53	"	".....	m	1	.....	10 00 w
Asst. secretary.....	36	"	".....	m	1	.....	12 00 "
Draftsman.....	39	New York	".....	m	1	sickness	1 62 d
Finisher.....	46	England	England.....	m	1	vacation	1 50 "
Machine hand.....	45	New York	U. S.....	m	1	"	7 50 w
Finisher.....	17	Michigan	".....	s	1	"	75 d
Molder.....	21	"	".....	s	1	various causes	12 00 w
Cabinet-maker.....	56	New York	".....	m	1	personal work	10 50 "
Church furn. hand.....	26	Canada	England.....	m	1	vacation	8 25 "
Teamster.....	31	Michigan	".....	m	1	"	1 75 d
Machine hand.....	50	New York	U. S.....	m	1	sickness & vacat'n	2 00 "
Molder.....	36	"	".....	m	1	various causes	8 00 w
Gluer.....	28	Michigan	Germany.....	m	1	sickness	8 00 "
Cabinet-maker.....	29	Canada	Canada.....	m	1	"	1 75 d
Asst. manager.....	29	Michigan	U. S.....	m	1	.....	100 00 m
Cabinet-maker.....	21	"	".....	s	1	vacation	1 12 d
".....	33	"	".....	m	1	.....	1 75 "
".....	23	Penn.	England.....	m	1	sickness	1 50 "
Machine hand.....	36	Michigan	U. S.....	m	1	"	1 25 "
Setter.....	28	"	".....	m	1	.....	1 25 "
Machine hand.....	34	Canada	England.....	m	1	sickness	1 25 "
".....	31	Michigan	U. S.....	m	1	"	1 75 "
".....	37	New York	".....	m	1	"	1 50 "
Gluer.....	21	Michigan	".....	s	1	vacation	1 25 "
".....	26	New York	".....	s	1	sickness & vacat'n	1 25 "
Machine hand.....	20	Michigan	".....	s	1	vacation	1 00 "
Finisher.....	22	"	".....	s	1	"	1 50 "
Laborer.....	38	Canada	Canada.....	m	1	sickn's & l'd off	1 50 "
Machine hand.....	52	Ireland	Scotland.....	m	1	sickness & vacat'n	1 25 "
".....	30	New York	U. S.....	m	1	sickness	9 00 w
Wood worker.....	41	Canada	".....	m	1	"	1 50 d
Machine hand.....	26	Michigan	".....	s	1	"	1 50 "
Wood worker.....	22	"	".....	s	1	vacation	1 25 "
Foreman.....	40	"	".....	m	1	vacat'n & sickness	20 00 w
Machine hand.....	29	"	".....	m	1	sickness	1 50 d
".....	39	"	".....	m	1	.....	10 00 w
".....	37	"	".....	m	1	sickness	10 00 "
Packer.....	29	"	".....	m	1	sickn's & no wrk	1 25 d
Decorator.....	29	New York	".....	m	1	.....	2 00 "
Machine hand.....	63	Michigan	".....	m	1	sickness	1 25 "
Wood worker.....	57	New York	".....	m	1	"	1 37 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
Daily papers.	Weekly papers.	Magazines.															
420			0	0	no			no	none				\$5 50		1	\$5 00	19
429			0	0	"			"	organ	1			\$5 00		2	11 00	17
366		\$341	\$25	0				yes	none	1							12
527		423	0	0	\$1,000	\$800		yes	"	1	3				1	6 00	13
570		570	150	0	1,500	475		"	organ	1	4		\$2,000		1	6 00	17
224			0	0	no			no	none								15
429		400	100	\$500	no		6 00	yes	"	1	3	2			1	6 00	16
570		520	0	0	3,000			"	"	1	3	1		2,000			16
468		468	0	0	800	450		"	organ						1	6 00	21
571		577	0	0	no		8 00	"	"	1	2						20
477		277	200	0	"			"	none	1	4				1	6 00	14
399		249	150	0	1,200			no	"						1	6 00	17
535		435	100	0	1,500			yes	"	1	2	1			1	6 00	19
458		358	100	0	800	750		"	organ					2,000	1	6 00	20
520		420	100	500	3,500			"	piano	1	1						16
624		624	0	0	no		3 00	"	melod.					2,000			17
546		496	0	0	"		8 00	"	none	1	7	1		2,000	1	6 00	19
448	0	448	0	0	"		7 00	"	organ						1	6 00	11
382		382	0	0	"		6 00	"	none	1	1			2,000	1	6 00	16
224			0	0	"			no	"								16
572			100	150	"			"	organ	1	1		3 50		2	11 00	16
535		335	200	50	2,750			"	none	1				2,000	1	6 00	17
398	\$50	293	100	0	1,000	300		yes	"		3				1	6 00	14
546		380	150	0	800	250		"	"	1		1			1	5 00	12
572		372	200	0	1,800			"	organ	1	1			1,000	1	6 00	12
399		324	75	0	no		8 00	"	none		2				1	6 00	17
407		382	25	110	"			no	"		1						10
535	0	335	200	125	"		7 00	"	"	1	1						18
1,200		600	530	2,000	1,400			"	"	1	2	1		2,000	1	6 00	14
291			0	0	no			"	"				3 00		1	5 00	16
546		546	0	0	1,200	600		yes	"		1						18
458		358	100	0	1,000	800		"	organ		2						17
357		357	0	600	800			"	none	1	1						13
390		390	0	500	2,500	1,000		no	organ			2					15
366	0	316	50	0	1,000	200		yes	"		2			1,000	1	6 00	21
535		535	0	0	900	400		"	none	1	2				1	6 00	14
448		323	125	0	1,000	550		"	"		1	1		1,000	1	6 00	16
382			50	0	no			no	organ	1	1		3 00		1	6 00	18
374			50	0	"			"	none				3 00		1	6 00	16
292			0	0	"			"	"				3 00		1	6 00	15
448			0	0	"			"	"				3 50				14
448	20	348	100	0	800	200		yes	"	1	1						12
374	200	374	0	0	500			"	organ		1						21
439		359	80	0	900	650		"	none			1			1	6 00	12
448		368	80	0	1,400	700		"	"		2				1	6 00	17
448		448	0	0	800	200		"	"	1	1				1	6 00	16
374			75	0	no			no	"	1	1		3 00		1	6 00	19
997		797	200	300	1,700			yes	piano	1	4	1		2,000	1	6 00	15
458		383	75	0	1,025	700		"	organ	1	3				1	6 00	14
520		400	150	0	900	200		"	"		1				1	6 00	21
477		477	0	0	no		10 00	"	none		3				1	6 00	21
341		341	0	0	"		4 00	no	organ								18
624		324	300	0	350	100		yes	none	1	2	1			2	11 00	16
357		257	100	0	1,000			"	"		4				1	6 00	18
411		411	0	0	2,000			"	organ		6			2,000	1	6 00	21

* Gives wages to parents and lives at home. † Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Moulder	25	New York	U. S.	m	1	0		7	11½	18	sickness-vacation	\$2 00 d
"	27	Michigan	England	m	0	0		6	11½	19	sickness	10 00 w
Iron work	28	"	U. S.	m	0	0		10	11½	18	sickness-vacation	10 00 "
Moulder	38	New York	"	m	1	0		10	11½	62	sick-personal wrk	15 00 "
Wood worker	38	Illinois	"	m	1	0		9	11½	18	"	1 50 d
Machine hand	42	Mass.	"	m	0	0		12	11½	7	sickness	1 75 "
Finisher	21	Michigan	"	s				2	12			1 12 "
Wood worker	45	New York	Ireland	m	1	1		22w	12			1 25 "
Laborer	47	England	England	m	3	2		6	11½	19	sickness	1 50 "
Moulder	31	New York	U. S.	m	2	2		11	11	26		11 00 w
Foreman	47	Michigan	Ireland	m	6	3		8	10½	39	"	2 25 d
Machine hand	49	England	England	m	1	0		4	12			1 37 "
Cabinet-maker	29	Canada	Canada	m	1	1		7	9	78	sickness	1 62 "
Machine hand	31	England	England	m	1	1		8	12			1 63 "
Cabinet-maker	51	New York	U. S.	m	2	1		10	12			1 75 "
Machinist	32	Michigan	"	m	3	2		14	12			2 00 "
Finisher	17	New York	"	s				2	12			1 00 "
Laborer	19	England	England	m	1	1		2	12			5 00 w
Japanner	24	Canada	Canada	m	1	1		2	11½	7	no work	10 00 "
Cabinet-maker	28	"	"	m	0	0		2	12			1 75 d
Moulder	29	Michigan	U. S.	m	0	0		11	11½	19	personal business	12 00 w
Travelling salesman	27	"	"	m	0	0		10	12			10 00 "
Foreman of glaziers	42	Mass.	"	m	2	2		9	12			2 00 d
Castings cleaner	18	Canada	Canada	s				2	11½	19	no work	5 50 w
Laborer	39	N. H.	U. S.	m	4	2		4	11½	7	vacation	1 50 d
Laborer	37	Canada	Canada	m	3	2		7	12			1 25 "
Chore boy	17	Michigan	U. S.	s				1	12			75 "
Machine hand	15	Canada	Canada	s				1	12			4 00 w
Castings cleaner	20	Ohio	U. S.	s				8	12			1 00 d
Finisher	27	New York	"	m	0	0		6	11	28	not answered	15 00 w
"	17	Michigan	"	s				1	11½	18	vacation	1 12 d
Moulder	35	New York	"	m	1	1		3	11	39	no work	12 00 w
Cabinet-maker	38	Canada	Canada	m	0	0		3	12			1 37 d
Laborer	31	"	"	m	2	1		3	12			1 25 "
Office boy	16	Michigan	U. S.	s				2	12			5 00 w
Machine hand	14	"	"	s				5½	6		first work	50 d
Laborer	61	Mass.	England	w	0	0		11	11	26	bad weather	1 25 "
Machine hand	37	Illinois	Ireland	m	4	3		7	12			9 00 w
Saw-filer	22	Canada	Canada	m	1	0		1	12			10 00 "
Machine hand	30	Michigan	U. S.	m	1	0		2	11½	18	vacation	1 25 d
Time-keeper	51	New York	"	m	1	1		8	11½	18	"	9 00 w
Machine hand	43	England	England	m	1	0		7	12			1 50 d
Cabinet-maker	79	New York	U. S.	m	1	1		7	11	26	sickness	1 50 "
Laborer	20	Michigan	"	s				2	12			1 00 "
"	57	"	"	m	2	0		20	12			10 00 w
Cabinet-maker	43	Canada	England	m	1	1		3	11½	19	sickness-vacation	1 62 d
Gluer	29	Conn.	U. S.	s				4	12			9 00 w
Lumber scaler	49	Vermont	"	m	2	2		10	11½	19	no work	1 75 d
Teamster	33	Delaware	England	m	1	1		2	12			1 25 "
Type-writer	20	Michigan	U. S.	s				2	11½	18	vacation	1 75 "
Engineer	41	New York	"	m	3	2		14	12			15 00 w
Finisher	18	Michigan	"	s				2	12			6 00 "
Cabinet-maker	29	"	"	m	1	0		2	12			1 32 d
Machine hand	37	"	"	m	1	1		4m	12			1 25 "
Laborer	42	Indiana	"	m	0	0		8	11½	6	vacation	1 50 "

TABLE NO. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of papers.
456			250	0	no		free	yes	none	
487			148	0	"		\$6 00	no	"	
496			148	0	\$1,500	\$400		yes	organ	1
520			125	0	1,000	440		"	none	1
448			0	\$100	no		6 00	"	"	1
588			200	40	1,200			"	"	
349			0	15	1,200			"	organ	1
490			0	200	no		6 00	"	none	
430	\$2,500		0	0	1,200	800		no	"	
524			100	0	1,000	400		yes	"	1
614			0	0	1,700			"	organ	
529	5		15	0	1,200	500		"	none	1
880			0	0	no		6 00	"	organ	
107			100	0	850			"	"	1
546			125	0	1,100	450		"	"	1
624			150	0	1,500	400		"	"	1
812			0	0	no			no	none	
200			0	0	"			"	"	
509	5		50	0	"		4 00	yes	"	
546	10		200	0	"		6 00	"	"	
585			200	0	2,000			"	organ	1
520			0	0	no			no	none	1
624			150	0	1,200	600		yes	organ	1
208	10		0	0	no			no	none	
458			0	0	600			yes	"	
390			125	0	200			"	"	
234			0	0	no			no	"	
206			0	0	"			"	"	
312			0	0	"			"	"	
715			200	0	1,450	1,100		"	organ	
826			0	0	no			"	none	
572			100	0	1,100	1,000		yes	organ	1
439	100		150	0	1,500	700		"	none	1
415	6		0	0	no		5 00	no	"	
380			50	0	"			"	"	
79			0	0	"			"	"	
257			100	0	1,200			yes	"	1
469			0	0	no		6 00	"	"	
520			0	0	"		7 00	"	organ	1
374			75	0	900	400		"	none	1
448			0	0	1,800			"	organ	
468	50		100	0	1,000	500		"	none	
429			0	0	no		8 00	"	organ	1
313			0	0	"			no	none	
720			200	600	1,800			yes	organ	1
475	25	475	0	0	no		7 00	"	none	1
408		468	0	0	1,500	200		"	"	1
512		882	150	0	2,000	700		"	organ	1
390		315	75	0	800	300		"	none	
523			100	2,800	no			no	piano	1
390		450	250	0	1,400	200		yes	organ	1
280			50	50	no			no	none	
507		407	100	0	"		6 00	yes	"	1
390		890	100	0	"			"	"	1
448		258	200	0	1,500	400		"	organ	1

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Cupola-tender...	32	Canada	Canada	m	4	2	5	2	2	11½	19	no work	\$8 00 w
Machine hand...	20	Michigan	U. S.	s	1	0	0	2	2	12	---	---	1 12 d
Gluer...	27	Penn.	"	m	1	0	3	1	1	12	---	---	1 50 "
Finisher...	18	Michigan	"	s	---	---	0	1	1	11½	7	no work	1 00 "
Machine hand...	29	"	"	m	2	1	3	2	2	12	---	---	1 37 "
Turner...	28	"	"	m	0	0	1	4	10	12	---	---	1 75 "
Shipping clerk...	28	"	"	m	1	0	2	6	6	12	---	---	10 00 w
Finisher...	17	"	"	s	---	---	0	1	1	12	---	---	4 50 "
GRANVILLE WOOD & SON, PIPE ORGAN CO., NORTHVILLE.													
Organ builder...	43	New York	"	m	3	2	4	5	5	12	---	---	3 25 d
"	38	England	England	s	---	---	2	3	8	11½	13	shut down	2 00 "
Piano maker...	44	Switz.	Switz.	w'r	1	1	1	14	1	9	78	personal work	2 50 "
Bellows-maker...	24	Vermont	U. S.	s	---	---	0	1	1	9	78	vacation	1 25 "
Oxan builder...	43	Canada	Germany	m	0	0	1	5	5	11½	7	sickness	2 00 "
"	40	New York	"	m	5	4	6	---	4	11½	13	not answered	2 25 "
Machine hand...	28	Vermont	U. S.	m	1	0	2	13	5	12	---	---	83 33 m
Engraver...	25	New York	"	m	1	0	2	5	3	11½	19	no work	2 00 d
Machine hand...	19	Michigan	Germany	s	---	---	0	2	2	11	26	"	1 00 "
Finisher...	46	N. Jersey	U. S.	m	5	3	6	23	5	11½	18	"	1 75 "
ELY DOWEL & M'F'G CO., NORTHVILLE.													
Machine hand...	47	Penn.	"	w'r	4	2	1	---	2m	12	---	---	9 00 w
Book-keeper...	31	Michigan	"	s	---	---	0	2w	1	12	---	---	6 00 "
Millwright...	74	Vermont	"	m	1	0	2	32	2	11½	7	old age	2 00 d
Engineer...	32	Ohio	"	s	---	---	0	8	1m	12	---	---	1 50 "
Machine hand...	16	Michigan	"	s	---	---	0	2m	2m	3	---	first work	3 30 w
Machine hand...	66	New York	"	m	1	0	2	23	6w	12	---	---	1 50 d
Machine hand...	19	Canada	Canada	s	---	---	0	½	½	12	---	---	1 00 "
ADRIAN FURNITURE M'F'G CO., ADRIAN.													
Cabinet-maker...	23	Germany	Germany	s	---	---	5	8	5	11½	13	repairs	1 75 "
Laborer...	45	"	"	m	6	4	7	14	1	12	---	---	1 25 "
"	44	England	England	m	7	4	8	5	4m	12	---	---	1 25 "
Cabinet-maker...	50	Michigan	U. S.	m	0	0	1	35	7	11½	---	---	1 50 "
"	65	Mass.	"	m	2	0	1	15	1	12	---	---	12 00 w
"	29	Germany	Germany	m	3	0	4	15	½	6	---	not in U. S.	1 25 d
"	30	"	"	s	---	---	0	5	2	12	---	---	1 25 "
"	31	"	"	s	---	---	0	5	½	12	---	---	1 50 "
Laborer...	57	"	"	m	6	1	3	2	3	12	---	---	1 25 "
Cabinet-maker...	52	"	"	m	2	0	2	25	1½	12	---	---	9 00 w
"	30	Michigan	U. S.	m	2	0	3	10	1½	12	---	---	50 00 m
"	43	New York	England	m	3	0	4	30	7	12	---	---	12 00 w
Laborer...	19	Michigan	Germany	s	---	---	0	5	5	12	---	---	1 25 d
Book-keeper...	45	Belgium	Belgium	m	---	0	1	27	2	12	---	---	150 00 m
Packer...	30	Ohio	Germany	s	---	---	0	4	4	12	---	---	1 25 d
Cabinet-maker...	16	Michigan	U. S.	s	---	---	0	2	2	11½	13	no work	75 "
"	43	Germany	Germany	s	---	---	0	27	5	12	---	---	8 00 w
"	20	Michigan	U. S.	s	---	---	0	1	1	12	---	---	50 d
"	28	"	Belgium	m	3	0	4	13	1½	12	---	---	12 00 w
Packer...	20	Germany	Germany	s	---	---	0	1	1	11	26	repairs	1 00 d
Teamster...	35	"	Germany	m	3	1	5	8	1	12	---	---	1 75 "
Cabinet-maker...	32	Michigan	U. S.	m	3	0	0	12	1½	12	---	---	9 00 w
Laborer...	41	Canada	Scotland	m	3	2	3	1	1	12	---	---	1 25 d
Cabinet-maker...	45	Germany	Germany	m	3	---	2	27	1m	12	---	---	1 50 "

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
380			0	0	no		8 00	yes	none	1	1				1	8 00	12
319			0	0	"			no	"				23 00				16
488			0	0	"		8 00	yes	organ	1	2	1		\$1,000	1	6 00	17
305			0	0	"			no	none		1		2 75				16
429			850	0	"		7 00	yes	"	1	2	2			1	6 00	15
540			100	0	\$1,800			"	organ	1	1			1,000	1	6 00	17
530			125	0	900	\$400		"	none	1	1	1		1,000	1	6 00	19
281			0	0	no			no	"								14
703			0	0	"		8 00	yes	"	1	3			3,000			16
568	\$100		0	0	900			no	"	1	2	1					17
585	80		150	0	no			"	piano		2		3 50				20
202			125	\$300	"			"	organ		2		3 00		1	5 00	16
611	0	611	0	0	1,900	850		"	"	1	1			1,000			21
678		678	0	0	3,000			yes	"	1	8						19
1,700		750	0	0	no		12 00	no	piano	1	1			1,000			14
585		585	50	0	"		8 00	yes	organ	1	2	1		1,000			20
284			0	0	"			no	none				3 25				15
628		396	125	0	1,000	525		yes	"	1	2				1	5 00	19
468			0	0	no			no	none				5 50		1	8 00	17
312			0	50	"			"	"				3 00				19
611		511	100	0	3,000	700		yes	"	1	3						22
468			0	0	no			no	"				3 50				17
29			0	0	"			"	"								16
468		468	0	0	"		7 00	yes	"	1	1			1,000			20
312	7		0	0	"			no	"		1		3 00				12
523	144	523	0	0	"		5 00	yes	"		1						14
300	40	225	0	0	\$800			"	"		2				1	4 00	14
1,040	150	500	0	0	no		4 00	"	"	1	1						8
463		468	0	0	2,500			"	"	1							15
624		150	refuse	0	no		5 00	no	organ		1						20
195	10	195	0	0	"			"	none								14
300	0		0	0	600			"	"				4 00		1	4 00	14
468			0	0	no			"	"				3 50				10
300	20	276	75	refuse	1,200			yes	organ	1	3	1			1	3 50	14
468	5	175	50	0	1,200			"	none		1				1	4 00	15
600		600	0	0	no		3 50	"	"	1							15
624		600	100	1,200	"		6 00	"	piano	1	2						18
330			0	0	"			no	none		1		6 00				13
1,800	200	600	700	refuse	"		12 00	yes	"	2	1	2		5,000			18
390			0	0	"			no	"				6 00				14
234			25	0	"			"	"	1	2		3 00				14
416	90		0	0	"			"	"				3 50				15
156			0	0	"			"	"		1		2 00		1	8 00	17
624		624	0	0	"		6 00	yes	"	1							15
286	3		10	0	"			no	"	1	2	2	4 00				13
546	80	546	0	0	"			yes	"		1				2	8 00	16
468		refuse	0	0	"			no	organ		1		3 50		1	8 50	17
300		250	60	50	700			yes	none		1						14
468		468	0	0	no		8 00	"	"								12

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	Cause for loss of time.	Wages received
Cabinet-maker.	41	Michigan.	U. S.	m	2	1	2	10	repairs	\$21 00 w
Machine hand.	18	Germany.	Germany.	s			0	1	"	50 d
Finisher.	18	Michigan.	Ireland.	s			0	2	"	50 "
"	19	New York	U. S.	s			0	1 1/2	"	32 75 m
"	17	Michigan.	"	s			0	1	"	75 d
"	35	"	Ireland	s			0	3	"	2 00 "
"	18	"	U. S.	s			0	1	"	75 "
"	21	"	"	s			0	2	"	2 00 "
"	16	"	"	s			0	1	"	50 "
"	17	"	"	s			0	1	"	75 "
"	18	"	"	s			0	1	"	75 "
"	23	New York	Ireland.	s			0	1	"	1 00 "
"	30	Ohio.	U. S.	s			0	1	"	2 00 "
Foreman.	30	Michigan.	Germany.	m	0	0	1	1 1/2	"	8 00 "
"	17	"	U. S.	s			0	1 1/2	"	75 "
Machine hand.	42	"	"	m	3	3	6	10		100 00 m
"	30	U. S.	"	m	2	1	2	3	repairs	1 50 d
"	28	"	Germany.	s			0	10	shut down	1 25 "
"	35	"	U. S.	m	5	2	6	2	repairs	1 75 "
"	29	"	"	s			0	8	"	1 75 "
"	68	Germany.	Germany.	m	0	0	1	3	"	75 "
"	19	U. S.	U. S.	s			0	3	"	1 00 "
"	22	"	Ireland.	s			0	4	"	1 25 "
"	22	"	Germany.	s			1	5	"	1 75 "
"	15	Michigan.	"	s			0	1	"	00 "
Cabinet-maker.	16	U. S.	U. S.	s			0	1		2 50 w
Machine hand.	21	"	"	m	1	0	2	1	repairs	1 50 d
"	22	"	Ireland.	s			0	4	"	1 00 "
"	19	"	U. S.	s			0	4	"	1 25 "
Cabinet-maker.	25	Ireland.	Ireland.	m	3	2	4	19	shut down	10 00 w
Machine hand.	30	U. S.	U. S.	m	3	0	4	1	repairs	1 25 d
"	28	"	"	m	1	0	2	10	shut down	1 75 "
"	31	Germany.	Germany.	m	1	1	2	8	"	1 75 "
"	27	U. S.	U. S.	m	1	0	2	1	shut down	1 50 "
Cabinet-maker.	54	"	"	m	0	0	1	15	"	10 50 w
"	29	"	Germany.	m	3	1	4	10	"	9 00 "
Machine hand.	21	"	"	s			0	5	repairs	1 35 d
"	40	Germany.	"	m	2	0	2	1	"	1 25 "
"	18	"	"	s			0	1	"	75 "
"	35	Michigan.	U. S.	m	2	1	3	1/2	"	1 00 "
"	18	"	Germany.	s			0	4	"	1 00 "
"	30	Germany.	"	m	2	0	3	10	"	1 75 "
"	40	New York	U. S.	m	3	0	2	10	"	1 50 "
"	14	Michigan.	Germany.	s			0	1/2	"	50 "
Carver.	32	Germany.	"	m	3	1	4	16		21 00 w
Machine hand.	18	Michigan.	"	s			0	3	repairs	75 d
Engineer.	39	U. S.	U. S.	m	1	1	2	25		2 00 "
Machine hand.	19	Germany.	Germany.	s			0	3	repairs	80 "
"	18	New York	"	s			0	2	shut down	1 00 "
"	20	Ohio.	U. S.	s			0	1/2	"	1 00 "
"	15	Michigan.	Germany.	s			0	1	repairs	50 "
"	16	Germany.	"	s			0	1/2	first work	50 "
"	16	Michigan.	"	s			0	1	repairs	50 "
"	15	"	Ireland.	s			0	1	"	50 "
"	14	"	England.	s			0	1/2	"	50 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$1,046		\$500	\$300	\$150	no		\$5 00	yes	piano	1	2						18
149			0	0	"			no	none	1	1		\$3 00	\$500			14
183			0	0	"			"	"	1	1						14
380			55	0	"			"	"	1	1		3 00				15
200			0	0	"			"	"	1	1		3 50				16
533			0	0	"			"	"	2	1						16
200			0	0	"			"	"	1	1		3 00				14
533			28	0	"			"	"	1	1		4 00				18
180			10	0	"			"	"	2	1		3 50				18
214			0	0	"			"	cornet	1	1		3 00				15
214			0	0	"			"	none	1	1		3 00				17
428			25	0	"			"	"	1	1		3 50				19
572			50	0	"			"	"	1	1		4 00		1	\$3 50	15
918	500		400	0	"		4 00	yes	"	1	1			800	1	3 50	15
200			0	0	"			no	"	1	1		3 00				15
1,200		700	400	2,000	\$5,500			yes	organ	1	4	1		2,000			18
479		429	0	0	450			"	none	1	1						16
374			0	0	no			no	"	1	1		3 00				18
500	500		0	0	450			yes	"	1	1						16
533			0	0	no			no	"	1	1		3 50		1	5 00	16
224	\$200	224	0	0	800			yes	"	1	1						15
299			0	0	no			no	"	1	1		3 50				16
357			0	0	"			"	piano	1	1		4 00				16
533			0	0	"			"	none	1	1		4 00				16
179			0	0	"			"	"	1	1		3 00				14
182			25	0	"			"	"	1	1		2 50				14
448	448		0	0	500			yes	"	1	1				1	3 00	16
299			0	0	no			no	"	1	1		3 00				16
357			0	0	"			"	"	1	1		4 50				15
477	477		0	0	800			yes	"	1	1			1,000	1	5 00	12
374		374	0	0	no		5 00	"	"	1	1						16
523		523	0	0	"		7 00	"	"	1	1				1	3 00	15
546		546	0	0	"		free	"	"	1	2				1	4 00	17
448		448	0	0	"		6 00	"	"	1	1				1	3 00	17
500		500	0	0	"			"	"	1	1			2,000			14
400		400	0	0	1,300			"	"	2	1			1,800	2	7 50	15
886			0	0	no			no	"	1	1		4 00				16
357	75	357	0	0	300			yes	"	1	1				1	3 50	16
214	10		0	0	no			no	"	1	1		3 50				16
234		234	0	50	"		3 50	yes	"	1	1				1	3 50	15
286			0	0	"			no	"	1	1		4 00				14
500	50	500	0	0	"			"	"	1	1						15
351		326	25	250	"		5 00	yes	"	1	1			1,000			14
156			0	0	"			yes	"	1	1		2 00		2	10 00	14
1,002	1,002		0	0	"		5 00	yes	"	1	1						16
214			0	0	"			no	"	1	1		4 00				15
624		624	0	0	"		7 00	yes	piano	1	1						18
259			0	0	"			no	none	1	1		4 00				14
226			0	0	"			"	"	2	1		3 50				14
812			0	0	"			"	"	1	1		4 00				17
149			0	0	"			"	"				3 00				14
78			0	0	"			"	"				2 50				15
143			0	0	"			"	"	1	1		3 00				15
143			0	0	"			"	"				3 00				14
156			0	0	"			"	"	1	1		3 00				14

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Causes for loss of time.	Wages received.
Machine hand...	17	Michigan	Germany	s			0	3	2	11½	18	repairs	\$0 75 d
Finisher	19	"	U. S.	s			0	1½	1½	12½	45	"	1 00 "
"	23	Kentucky	"	s			0	2	1	11	45	"	2 00 "
"	17	Ohio	Germany	s			0	1	1		45	"	80 "
"	19	Michigan	Ireland	s			0	1	1		45	"	1 00 "
"	18	"	U. S.	s			0	1	1		45	"	75 "
"	18	"	"	s			0	1	1		26	"	75 "
"	17	"	"	s			0	2	2		45	"	1 00 "
"	18	"	"	s			0	1	1		26	"	75 "
"	23	"	Germany	s			0	3	3		45	"	2 00 "
"	18	"	Ireland	s			0	1	1		45	"	75 "
"	19	"	"	s			0	1	1		45	"	1 00 "
"	31	"	U. S.	s			0	1	1		45	"	12 00 w
"	30	Penn.	Ireland	s			0	4	1		45	"	12 00 "
"	17	Michigan	U. S.	s			0	1	1		45	"	75 d
Cabinet-maker	19	"	"	s			0	3	3		18	"	2 25 "
Traveling man	25	Conn.	"	m	0	0	1	4	3		32	no business	18 00 w
Finisher	16	New York	Germany	s			0	1	1		45	repairs	50 d
"	17	Michigan	Scotland	s			0	1	1		45	"	75 "
"	19	"	U. S.	s			0	1	1		26	"	75 "
"	18	Vermont	"	s			0	1	1		26	"	75 "
"	23	Ohio	"	s			0	3	1		45	"	2 00 "
"	17	Michigan	"	s			0	1	1		26	"	75 "
Cabinet-maker	19	"	"	s			0	1	1		26	"	1 00 "
Finisher	18	Mass.	England	s			0	1	1		45	"	75 "
Cabinet-maker	19	Michigan	U. S.	s			0	2	3		26	"	1 25 "
Finisher	17	"	Germany	s			0	1½	1½		45	"	50 "
CURTIS & BENNETT, CHARLOTTE.													
Machinist	30	New York	U. S.	m	1	0	2	11½	11½		6	sick and no w'rk	12 00 w
Bench-worker	25	Michigan	"	m	1		2		½		30	repairing	5 00 "
Packer	38	"	England	s			0	3	2		12	sickness	7 50 "
Finisher	31	U. S.	U. S.	s			0	2½	2m		59	"	6 00 "
"	47	New York	"	m	4	3	5	25	4			"	1 25 d
"	37	Illinois	"	m	0	0	1	3	3			"	8 25 w
Cabinet-maker	35	New York	"	m	3	0	4	47	5			"	7 50 "
Bench-worker	53	"	"	m	5	5	4	8	5			"	7 50 "
"	27	"	"	s			0	7	7		18	shut down	9 00 "
"	55	"	"	w'r	4	1	2	2½	2½		18	sickness	1 25 d
Machine hand	17	Michigan	"	s			0	2	3			"	7 50 w
"	24	"	"	s			0	3	6	12		"	7 50 "
"	19	"	"	s			0	4	4	11½	12	sickness	7 50 "
Turner	34	Mass.	"	m	3	1	2	15	8	11	26	sickness & no w'rk	9 00 "
Scroll Sawyer	46	Michigan	"	m	4	4	5	5	4	10½	30	moving shop	10 00 "
Head Sawyer	47	New York	"	m	3	2	4	15	½	12		"	12 00 "
Teamster	37	Michigan	"	m	0	0	1	10	2m	12		"	7 50 "
Bench-worker	39	Scotland	Scotland	w'r	2	1	2	12	2	12		"	10 00 "
"	41	Ohio	U. S.	m	1	1	2	2	2	11	26	repairing	9 00 "
Machine-hand	53	New York	"	m	3	0	4	18	13	11	26	sickness	10 00 "
Shipping clerk	38	"	"	m	0	0	1	1	4	11½	7	"	7 50 "
Finisher	23	Holland	Holland	m	4	2	5	13	½	12		"	15 00 "
Cabinet-maker	28	Michigan	U. S.	m	1	0	2	10	10	11½	13	sickness	9 00 "
Finisher	22	New York	"	s			0	4	3	11½	19	laid off	7 50 "
Machinist	35	Ohio	"	m	2	2	3	12	2	11½	13	sickness	8 25 "
Laborer	34	New York	"	m	1	1	2	20	3w	6	158	no work	1 25 d
"	45	Germany	Germany	m	7	4	3	1	1	8½	91	"	1 25 "

TABLE NO. 17—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$224			0	0	no			no	none	1	1		\$3 00				15
286			\$75 00	0	"			"	"	1	1		25 00				16
533			0	0	"			"	"		1		25 00				15
133			0	0	"			"	"	1	1		25 00				14
286			0	0	"			"	"	1	1		50 00				15
200			0	0	"			"	"		1	1	3 00				17
214			0	0	"			"	"		1	1	3 00				15
266			0	0	"			"	violin		1	1	3 00				14
214			0	0	"			"	none		1	1	3 00				17
533			0	0	"			"	"	1			4 00				16
200			15	0	"			"	"			1	3 00				15
426			50	0	"			"	"		1	1	3 50				16
533			100	0	"			"	"		1	1	3 50				15
533			90	0	"			"	"		1	1	3 50				15
200			0	0	"			"	"			1	3 50				14
672			175	\$150	"			"	"		1	1	3 50				16
780		\$500	300	1,000	\$3,000			yes	plano	1	3	1	3 50	\$1,500			19
133			0	0	no			no	organ	1	1	1	2 50				14
200			0	0	"			"	organ	1	1	1	3 00				15
214			0	0	"			"	none	1	1	1	3 00				15
214			0	0	"			"	"	1	1	1	3 00				16
533			30	0	"			"	"	1	1		4 00				17
214			0	0	"			"	"		1	1	3 00				16
226			0	0	"			"	"		1	1	3 50				18
200			0	0	"			"	"		1	1	3 00				15
357			50	0	"			"	"		1	1	3 50				17
133			0	0	"			"	guitar	1	1	1	3 50				14
641		156	250	0	900	\$500		yes	organ	1	2	1			1	\$3 00	12
337		337	0	0	300			"	none	1	1	1					12
341			0	0	no			no	"	1	1	1	3 00		1		15
299			*	0	"			"	organ	1	1	1	*				14
317		317	0	0	"		\$5 00	yes	none	1	1	1		2,000			12
429		429	0	0	"		6 00	no	"		1	1					10
390		390	0	0	"			"	"		1	1					19
390		390	0	0	"		6 50	"	"	1	1	1					12
448			0	0	"			"	"		1	1	3 00				15
374		374	0	0	"		5 00	"	"		1	1					12
390			140	0	"			"	"		1	1	3 00				14
390			0	0	"			"	"	1	1	1	3 00				15
374			0	0	"			"	"		1	1	2 75				18
429		300	100	0	1,000			yes	melod'n	1	2	2					18
455		455	0	0	no		6 00	"	"		4	1					15
324		724	100	0	1,500			"	none		4	1					15
390		390	0	0	no		4 00	no	"		3	1					17
520	\$100	520	0	0	"		4 00	"	"		3	1		2,400	2	3 50	13
429		300	75	300	1,300			yes	"		1	1					12
477		477	0	0	1,000			"	"	1	1	1		1,000			12
382		382	0	0	1,000			"	"	1	1	1					9
780	0	400	0	0	600	400		no	organ		1	1					13
473		230	144	0	1,300			yes	none	1	1	4			1	4 00	17
366			0	0	no			no	"		1	1	2 50				14
411		386	25	50	"		5 00	yes	organ		3	1		1,260	1		15
235		235	0	0	"			"	none		2	1	3 00		2		10
276	25	276	0	0	500			"	"		1	1					9

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present em- ployer.	In the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Teamster.....	28			M	3	2	3	2	2		28	sickness	\$1 25 d
Laborer.....	41			M	3	2	4	25	4	X	0	"	1 25 "
Carp'ter & teamst'r	28			M	1	1	2	15	1			"	1 25 "
Laborer.....	25			M	2	2	2	22	8	X	0	repairing	1 25 "
Machine hand...	18			S			0	4	0	X		"	1 75 "
Engineer.....	51			M	1	0	2	27	14			"	1 50 "
Laborer.....	45			M	3	1	4	30	5		150	no work	1 25 "
Engineer.....	44			M	3	2	4	24	1		150	"	1 50 "
Machine hand...	15			S			0	3	1	%	12	sickness	1 00 "
Finisher.....	26		many	S			0	5				"	1 25 "
Machine hand...	25		S.	M	0	0	1	10	10		20	sickness	10 00 w
Laborer.....	20			S			1	10	11	%	12	"	1 25 d
Machine hand...	16			S			0	1	1			"	8 50 w
Laborer.....	18			S			0	2	1			"	75 d
".....	23			M	2	2	4	16	2	X	50	bad weather	1 25 "
Machine hand...	51			M	3	4	2	20	2	X	50	moving shop	8 25 w
".....	24			M	0	0	1	2	6		104	no work	1 25 d
".....	25			M	2	0	3	3	6		25	sickness	1 00 "
".....	41			M	2	2	3	3	2	X	12	"	1 25 "
".....	17			S			0	1	1	%	30	no work	1 00 "
Sawyer.....	29			M	1	0	2	3	2		52	repairing	1 25 "
CHARLOTTE MANUF'G CO., CHARLOTTE.													
Bench hand.....	58	New York	U. S.	M	3	0	4	4	4	X	50	sickness	1 50 "
Laborer.....	44	Ohio	"	M	5	2	4	24	4	%	91	no work	7 00 w
Cabinet-maker...	38	Michigan	"	M	0	0	1	4	4	X	12	sickness	9 50 "
Finisher.....	21	"	Germany	S			0	7	2	X	50	laid off	1 40 d
Turner.....	37	Penn.	U. S.	M	2	3	2	12	4		20	sickness	12 00 w
Cabinet-maker...	22	Germany	Germany	M	2		3	19	3	X	50	"	10 00 "
Finisher.....	23	Michigan	U. S.	M	1		2	12	3		25	"	8 00 "
Machine hand...	21	"	"	S			0	4				"	5 50 "
".....	20	"	Germany	M	2	0	3	4				"	8 00 "
Packer.....	24	Ohio	U. S.	M	0	0	1	1m	1			"	5 00 "
Finisher.....	26	"	"	M	0	0	1	5	5			"	10 50 "
".....	23	Michigan	"	S			0	4	3		155	no work	8 25 "
Laborer.....	21	New York	"	M	0	0	1	5	1			"	1 00 d
Finisher.....	27	Michigan	"	M	6	2	7	4	4		78	sick and no w'rk	1 50 "
Engineer.....	23	New York	"	M	1		2	11	10	%	12	sickness	1 50 "
Finisher.....	33	"	"	M	1		2	1	1		26	"	1 00 "
".....	16	Michigan	"	S			0	7m	7	%	12	"	5 00 w
Machine hand...	27	"	"	M	0	0	1	12	3		26	"	1 55 d
".....	33	Ohio	"	M	0	0	1	7	4	X	19	"	1 45 "
Turner.....	20	Michigan	"	S			0	4	4	X	50	laid off	1 80 "
Machine hand...	19	"	"	S			0	5				"	5 00 w
".....	30	Penn.	"	M	0	0	1	15	4		50	sickness	9 50 "
".....	30	Ohio	"	M	3	2	4	16	3		20	"	9 75 "
Bench-work.....	22	Michigan	"	S			0	3	3			"	1 50 d
".....	24	"	"	M	0	0	1	3	6		155	sick and no wrk	8 00 w
Machine hand...	49	New York	"	M	3		4	20	2			"	1 25 d
".....	26	Michigan	"	M	1	0	2	10	5	11	26	sickness	10 00 w
".....	35	New York	"	M	1		0	5	5	11	26	"	10 00 "
".....	22	"	"	S			0	5	3w	12		"	75 d
Machinist.....	45	England	England	M	0	0	1	23	7	12		"	2 25 "
Machine hand...	16	Michigan	U. S.	S			0	1	1	11%	12	no work	75 "
".....	20	Cent. Am	Scotland	S			0	3	3	11	26	holidays	7 00 w
".....	35	Penn.	U. S.	M	4	3	5	2	1	11%	6	sickness	1 50 d
".....	29	Michigan	"	S			0	3	3	11	26	laid off	1 00 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	Daily papers.	No. of persons in family.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
2357		no		\$4 50	yes	none							9
382		"		3 00	"	"							10
390		\$200			"	violin							10
383		no			no	none			\$3 50		1	\$7 00	9
548		"			"	"			4 00				15
468		700	\$100		yes	"				\$2,000	1	3 00	10
454		800	100		"	"							9
234		no		free	"	"	1			1,000	2		17
249		"			no	drum			3 00		1		10
390		"			"	none			3 00				15
477		1,200			yes	"					1	3 00	10
374		no			no	"	1		3 00				12
182		"			"	"			4				10
234		"			"	violin	1		3 50				16
317		"		6 50	yes	none					2	3 00	12
379		"		3 67	"	"	1						10
290		"		4 00	no	violin				200	1	1 50	15
301		"		5 00	yes	none				1,000			10
374		"		5 00	no	"							10
373		"			"	"	1		2 00				15
335		"		6 50	yes	"							15
390		800			"	"	1						14
261		no		3 50	"	"							10
473		300			"	"							24
355		no			no	"			3 00				13
572		"			"	"			3 00	2,000	3		21
422		"		3 00	yes	"	1				1	3 00	13
381		"		4 00	no	"	1						15
298		"			"	organ			3 00				19
416		"		6 50	"	melod'n							15
390		"		6 00	yes	none							13
548		800	100		no	"				2,000	1		8
214		no		free	yes	organ	2		3 00				14
312		"		5 00	"	none							16
351		"		4 00	"	organ	1			2,000	2	3 00	18
448		"		4 00	no	none							17
328		"		7 00	"	organ			2 00				13
249		"			"	"				2,000	1		17
443		1,200	300		yes	none					1	3 00	14
524		no			no	"			3 00				16
458		"			"	"							14
280		"			"	"			4 50				13
412	300	112	0	5 00	yes	melod'n	1						13
475	350	75	0	900	"	none				2,000			14
465		0	0	no	no	"			2 50				19
208	208	0	0	600	"	"	1						10
390	390	0	0	no	6 00	yes				700			15
477	300	100	0	600	"	"							15
477	300	100	0	1,200	175	"				2,000			17
234		75	0	no		melod'n			3 00				12
702	300	300	2,000	1,200		banjo	1						17
234		0	0	no		none			2 00				14
394		0	0	"		"			3 00				15
458	350	0	0	"	4 00	yes							17
296		0	0	"		no	1		3 00				13

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	How many depend on you for support.	No. of months employed dur- ing the year.	No. of days of lost time dur- ing the year.	Cause for loss of time.	Wages received.
HOUCK & PERKINS, CHARLOTTE.								
Finisher	36	New York	U. S.	m	11½	6	vacation	\$8 60 w
Packer	28	Ohio	"	m	11½	19	laid off	1 25 d
"	28	Michigan	"	m	12			1 00 "
Finisher	31	Ohio	"	m	11½	19	vacation	6 40 w
"	21	Michigan	"	m	11½	6	"	7 00 "
Engineer	48	New York	"	m	11	26	shut down	1 75 d
Machine hand	59	Ohio	"	m	12			1 50 "
Finisher	23	Michigan	"	w	11½	13	sickness	1 25 "
"	47	Ohio	"	m	1		dring	1 00 "
Bench-worker	60	New York	"	m	1		& no w'rk	1 25 "
"	24	Ohio	"	w	1		ness	1 00 "
Machine hand	29	"	"	m	11			8 00 w
"	19	Michigan	"	m	11			6 75 "
Machinist	34	New York	"	m	11			1 75 d
Mechanic	40	"	"	m	11		of work	1 00 "
Bench-worker	31	Michigan	"	m	11			75 "
Machine hand	37	Ohio	"	w	11			1 25 "
Mechanic	44	Michigan	Ireland	w	11		ness	1 50 "
Bench-worker	30	New York	U. S.	w	11			1 50 "
AULSBROOK & STURGIS, STURGIS.								
Yard hand	36	Germany	Germany	m	11		& holiday	1 25 "
Carver	16	Michigan	U. S.	m	11		repairs	75 "
Cabinet-maker	39	Penn.	"	m	11			29 66 m
Finisher	21	Michigan	"	m	11			1 25 d
Cabinet-maker	54	Penn.	"	m	11			9 00 w
"	26	England	England	m	11			7 50 "
Packer	27	Germany	Germany	m	11			1 25 d
Yard hand	54	"	"	m	11			1 25 "
Carver	19	Michigan	U. S.	m	10½	46	sick, holid'y rep	1 00 "
Machine hand	28	Indiana	Germany	m	11	26	rs	2 00 "
Carver	47	Canada	Canada	m	13			20 00 w
Finisher	17	Michigan	Germany	m	11	26	rs	7 00 "
Packer	64	New York	U. S.	m	11½	13		1 25 d
Cabinet-maker	36	"	"	m	11½	19		1 50 "
Sawyer	20	Michigan	Germany	m	11½	13		1 25 "
Sander	28	"	"	m	11½	13		7 00 w
Finisher	30	Penn.	U. S.	m	11½	13		1 00 d
Cabinet-maker	33	Illinois	England	m	11½	13		15 00 w
Finisher	23	Germany	Germany	m	11½	13		1 25 d
"	16	Michigan	"	m	11	26	al	88 "
"	20	Wiscons'n	"	m	11	26	h	7 00 w
Carver	19	Indiana	U. S.	m	11	26	rs	26 00 m
Finisher	26	Ohio	"	m	11½	19		10 00 w
Sander	51	Michigan	"	m	11	26		1 25 d
Finisher	23	"	Germany	m	11	26		10 00 w
"	19	"	"	m	11	26		8 00 "
Cabinet-maker	63	Germany	"	m	11½	19		9 00 "
Laborer	55	"	"	m	11	26		1 25 d
Finisher	18	Michigan	"	m	11	26		8 00 w
"	31	Germany	"	m	11½	13		1 00 d
Cabinet-maker	48	"	"	m	11½	19		7 50 w
"	24	Kansas	U. S.	m	10	53		1 25 d
Engineer	20	Michigan	"	m	11½	13	rs	1 25 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
433		433	0	0	no		\$5 00	yes	none		1						13
366			0	0	no			no	"								19
312		312	0	0	\$1,000			yes	"	1	1	2					13
414			0	0	no			no	"		1						13
356			0	0	no				horn		1		\$1 50				16
600		300	\$100	0	1,200			yes	organ	1	8						9
468		300	0	0	2,000	\$200			"	1							19
374			0	0	no			no	none		1	1	2 50				14
429		429	0	0	1,500			yes	organ	1	4				1		17
357		207	150	0	1,500	450			none	1	2				1		16
286		286	0	0	1,000			"	organ		2	1					19
416		250	50	0	no		6 00	no	none								10
351			0	0	no				banjo				3 00				13
571		250	250	0	1,200	200		yes	none		8	1					16
156		156	0	0	no		4 50	no	"	1							19
284			0	0	"			"	"								13
390		390	0	0	"		6 00	yes	"		1						14
331		450	0	0	1,500	250			organ	1	1						7
468		400	0	0	no		7 50	"	"								15
374	0	374	0	0	no		4 50	no	none		1						11
214		*	0	0	no				"				*				8
436		436	0	0	800	180		yes	melod		1						10
357		357	0	0	no		4 00	no	none		1						16
448		329	100	\$900	1,000	400			"		2						12
374	\$25	374	0	0	no		4 00	"	"	1							14
390		315	75	0	700	350		yes	"	1	1						14
705	30	705	0	0	400			"	"								9
296		*	0	0	no			no	"		1		*				8
572		400	100	3,350	"		4 00	yes	"	1	1						17
1,040	30	240	200	0	800	100		"	"	1			\$1,250		3	2 00	18
334		*	0	0	no			no	"				*				12
374		299	75	0	1,000			yes	"		1						13
439		364	75	0	550				"		1						13
374			50	0	no			no	"		1		3 00				13
536		536	0	0	420	420		yes	organ		1						14
299		299	0	0	400			"	none								18
747		547	200	75	2,000			"	"	2	8	1					18
374		250	50	0	425			"	"		2						11
172		*	0	0	no			no	"				*				14
334			0	0	"			"	"				2 50				16
275		50	0	0	"			"	"		4		†				14
487		487	0	0	"			"	"								15
357		307	50	0	100			yes	"	1	2	1					12
477			75	110	no			no	"		1		3 50				15
331			40	0	"			"	"								14
539	50	200	50	480	1,800			yes	"	1	1		3 00				11
357	0	357	0	0	800			no	"	2	1						14
331			0	0	no			"	"				2 50				13
299			15	175	"			"	"				2 50				10
666	0	666	100	200	800			yes	organ	2	1						15
325			180	175	no			no	none		1		3 00		1	3 00	15
374			75	80	"			no	"	1			2 50				18

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.		Wages received.
Cabinet-maker.	51	Germany.	Germany.	m	airs	\$9 00 w
"	26	Illinois.	Canada.	s	p'irs	1 25 d
"	30	Michigan.	U. S.	s		7 50 w
Machine hand.	41	Germany.	Germany.	m	airs	1 75 d
Packer.	50	Mass.	U. S.	m		1 25 "
Machine hand.	31	Michigan.	"	m		1 25 "
"	20	Illinois.	Germany.	e	airs	1 25 "
Designer.	30	Michigan.	U. S.	m		3 00 "
Elevator-man.	32	Germany.	Germany.	m	s	1 25 "
Finishing foreman.	29	"	"	m		15 00 w
Cabinet-maker.	35	"	"	m	p'irs	7 50 "
Machine hand.	44	Kentucky.	U. S.	m		1 25 d
"	40	Michigan.	"	m	s	1 75 "
Cabinet-maker.	35	Germany.	Germany.	m		9 00 w
Finisher.	15	Michigan.	"	s		60 d
"	20	"	"	s		8 00 w
Machine hand.	33	New York.	"	m		1 50 d
"	31	Michigan.	U. S.	m		7 50 w
Finisher.	14	"	Germany.	s		60 d
"	27	Germany.	"	m		1 25 "
GROBISER & CROSSBY FURNITURE CO., ST.						
Machine hand.	44	Germany.	Germany.	m		1 00 "
Turner.	31	Ohio.	U. S.	m	s	10 00 w
Machine hand.	33	Germany.	Germany.	m		1 25 d
"	44	Indiana.	U. S.	m		6 00 w
Book-keeper.	26	Michigan.	"	m		1 50 d
Machine hand.	29	Penn.	"	m		1 40 "
Machinist.	30	Germany.	Germany.	m	red	12 00 w
Packer.	42	Canada.	Scotland.	m		1 50 d
Machine hand.	51	New York.	U. S.	m		1 00 "
Yard hand.	15	Michigan.	"	s		1 00 "
Machine hand.	30	Missouri.	"	m		1 00 "
"	12	Michigan.	Germany.	s		25 d
Finisher.	34	Germany.	"	m		1 50 "
Filler.	14	Michigan.	U. S.	s	s	4 50 w
Cabinet-maker.	38	Kentucky.	Germany.	m		1 35 d
Machine hand.	48	Ohio.	U. S.	m		1 00 "
Sawyer.	23	Germany.	Germany.	s		1 30 "
Yard hand.	38	"	"	m	ed	1 00 "
Engineer.	24	Michigan.	"	m		1 25 "
Finisher.	19	"	Canada.	s	k	1 25 "
Filler.	16	Indiana.	Germany.	s	s	75 "
Finisher.	40	Ohio.	U. S.	m	shop	10 00 w
Machine hand.	27	Indiana.	Switz.	m	ed	1 25 d
WAITE & BARNES FURNITURE CO., STUR						
Engineer.	28	Michigan.	U. S.	s		1 50 "
Laborer.	40	Germany.	Germany.	m		1 00 "
Machine hand.	56	"	"	m	wrk	1 25 "
"	24	New York.	U. S.	s		1 25 "
Cabinet-maker.	29	"	Germany.	m		1 25 "
Laborer.	37	Michigan.	U. S.	m		1 50 "
Machine hand.	64	France.	France.	m		6 00 w
Sawyer.	24	Holland.	Holland.	m		3 00 d

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If board ing, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$429	\$25	\$350	\$50	0	\$400	\$275	---	no	none								14
325			0	0	no		---	"	"	2	1		\$3 00				14
390			0	0	400		---	"	"	2	2		\$50				15
510	0	510	0	0	600	150	---	yes	"	1	1			\$200			14
357		357	0	0	no		\$4 00	"	"	1	1	1					14
357		*	0	0	no		---	no	"				*				15
998		500	200	0	600		---	yes	p. & vio	1	3						14
357		357	0	0	no		4 50	"	none	1	1						12
715		415	300	0	600		---	"	"	2	1						16
357		200	75	0	700	100	---	"	"	2	2						15
417		370	0	0	no		4 00	"	"	1	1				1	\$1 00	20
500		500	0	0	1,500		---	"	"	2	2			1,000			20
429	150	300	100	0	550		---	"	"	2	2						15
172		*	0	0	no		---	no	"				*				14
399		125	0	0	"		---	"	"				3 50				12
448		398	50	0	600		---	yes	"	1	1						28
374		224	150	\$300	no		4 00	"	organ	1	1				1	1 00	12
172		*	0	0	"		---	no	none				*				12
478		436	25	0	"		4 00	"	"	1	1						14
312		312	0	0	300	300	---	yes	"					530	1	3 00	14
347		347	0	0	no		4 00	"	"	3	3			1,000			11
280		239	0	0	"		3 00	"	"								13
408		408	0	0	"		free	"	"								19
468		468	0	0	"		---	no	"	1	1		4 00				9
452		400	0	0	"		3 00	yes	"	1	1	1					12
520		520	0	0	"		4 00	"	violin	1	1						10
468	200	468	0	0	"		6 00	"	none	3	3			1,000			12
208		300	0	0	"		6 00	no	"	1	2						18
312		300	40	0	"		---	"	"	1	1	1	+				11
208		208	0	0	"		4 00	yes	"	1	1						15
68		*	0	0	"		---	no	"				*				11
312	65	300	0	0	525	400	---	yes	"	1	1						16
214		no	2	0	no		---	no	"	1	1		2 50				12
386		386	0	0	"		4 00	"	"	1	1						12
522		522	0	0	"		5 00	yes	"								17
218		0	0	0	"		---	no	"				4 00				14
286	0	286	0	0	700		---	yes	"								12
357		200	10	0	no		5 00	no	"	1	1						14
374		15	0	0	"		---	"	"				+				10
214		*	0	0	"		---	"	"				*				12
1,179		477	0	0	"		7 00	yes	"	2	1						8
280		280	0	0	"		6 50	no	"								12
468		0	0	0	"		---	"	"	1	1	1	3 50		1	10 00	17
364	100	364	0	0	400		---	yes	"	1	1						9
325	0	325	0	0	500		---	"	"	1	1						14
390		55	0	0	no		---	no	"	1	1		3 50				12
325		325	0	0	600	400	---	yes	"	1	1						17
468		468	0	0	900		---	"	"	1	2	2					12
290	4	290	0	0	700		---	"	"	1	1	1					8
585		585	0	0	no		4 50	no	"								10

* Gives wages to parents and lives at home. † Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending
Sawyer.....	20	Michigan	Germany	s	..	..
Machinist.....	34	Indiana...	U. S.....	m	2	..
Cabinet-maker.....	40	Ohio.....	".....	m	4	..
Machine hand.....	37	".....	".....	m	1	..
Wood-worker.....	26	".....	".....	s	..	..
Machine hand.....	18	".....	Germany	s	..	..
Book-keeper.....	19	".....	U. S.....	s	..	..
Machine hand.....	44	".....	Germany	m	7	..
Yard hand.....	48	".....	".....	m	6	..
Designer.....	41	".....	Ireland	s	..	..
Yard boss.....	34	".....	Germany	m	2	..
Sawyer.....	16	".....	U. S.....	s	..	..
FILBERTOWN MANUFACT'G CO., MANISTEE.						
Sawyer.....	20	Germany	Germany	s	..	..
Gluer.....	20	"	"	m	0	..
Machine hand.....	19	"	"	s	..	..
".....	25	Michigan	U. S.....	s	..	..
Cabinet-maker.....	32	Denmark	Denmark	m	0	..
".....	48	Canada	Canada	m	2	..
Packer.....	31	Germany	Germany	m	2	..
Engineer.....	55	Michigan	U. S.....	m	4	..
Fireman.....	50	Poland	Poland	m	4	..
General hand.....	66	Penn.....	U. S.....	m	4	..
Yard foreman.....	38	Denmark	Denmark	m	2	..
Yardman.....	27	Poland	Poland	m	1	..
Machine hand.....	27	Michigan	Ireland	s	..	..
".....	38	Germany	Germany	m	5	..
Laborer.....	26	Poland	Poland	m	0	..
Machine hand.....	19	Italy	Italy	s	..	..
Cabinet-maker.....	19	Michigan	Germany	s	..	..
Machine hand.....	20	New York	U. S.....	s	..	..
Packer.....	35	Poland	Poland	s	..	..
Shipping clerk.....	36	Canada	Canada	m	1	..
Finisher.....	18	Michigan	U. S.....	s	..	..
Machine hand.....	22	"	"	m	0	..
".....	14	"	"	s	..	..
Packer.....	30	Germany	Germany	s	..	..
Trimmer.....	28	Sweden	Sweden	s	..	..
Machine hand.....	27	Germany	Germany	m	4	..
Cabinet-maker.....	23	Sweden	Sweden	m	0	..
Finisher.....	16	Michigan	U. S.....	s	..	..
Filler.....	49	Germany	Germany	m	2	..
Shellacer.....	18	Michigan	U. S.....	s	..	..
Cabinet-maker.....	22	Denmark	Denmark	s	..	..
".....	21	Sweden	Sweden	s	..	..
".....	24	"	"	s	..	..
Finisher.....	18	Michigan	U. S.....	s	..	..
Laborer.....	14	"	Canada	s	..	..
Sand-paperer.....	14	"	U. S.....	s	..	..
Laborer.....	14	"	Germany	s	..	..
".....	54	Germany	"	m	6	..
Sand-paperer.....	12	Michigan	U. S.....	s	..	..
Finisher.....	21	"	"	m	0	..
".....	35	New York	"	m	1	..
Cabinet-maker.....	27	Norway	Norway	m	1	..

TABLE NO. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$390	-----	-----	0	0	no	-----	-----	no	none	-----	-----	-----	-----	-----	13
624	-----	\$524	\$100	0	\$500	\$400	-----	yes	melod'n	1	\$3 50	-----	1	\$4 50	13
711	-----	511	200	0	1,000	100	-----	"	organ	1	-----	-----	3	10 00	9
455	-----	455	0	0	no	-----	\$4 50	no	none	1	-----	-----	-----	-----	14
458	-----	-----	0	0	"	-----	-----	"	"	1	3 50	-----	-----	-----	18
812	-----	-----	*	0	"	-----	-----	"	"	-----	-----	-----	-----	-----	15
240	-----	-----	0	0	"	-----	-----	"	"	1	↑	-----	-----	-----	14
390	\$75	390	0	0	600	200	-----	yes	"	1	-----	-----	-----	-----	14
156	260	156	0	0	800	-----	-----	"	"	1	-----	\$300	-----	-----	14
1,192	-----	-----	0	0	no	-----	-----	no	"	1	9 00	-----	-----	-----	15
305	-----	805	0	0	800	400	-----	yes	"	2	-----	-----	-----	-----	18
143	-----	-----	*	0	no	-----	-----	no	"	1	*	-----	-----	-----	9
-----	-----	-----	-----	0	no	-----	-----	no	"	-----	-----	-----	-----	-----	14
180	-----	-----	0	0	no	-----	-----	"	"	-----	8 50	-----	-----	-----	9
196	-----	196	0	0	700	-----	-----	"	"	1	-----	-----	-----	-----	10
857	-----	-----	0	0	no	-----	-----	"	"	-----	8 50	-----	-----	-----	11
585	-----	-----	100	0	"	-----	-----	"	"	-----	3 50	-----	-----	-----	16
409	100	409	0	0	"	6 00	yes	"	"	-----	-----	-----	1	5 00	16
520	-----	520	0	0	600	300	8 00	"	"	1	2	-----	-----	-----	10
382	8	108	100	0	300	4 00	-----	no	"	-----	-----	-----	-----	-----	10
747	-----	500	247	0	2,000	-----	-----	yes	"	-----	8	-----	-----	-----	14
382	0	382	0	0	no	-----	-----	no	"	-----	-----	-----	-----	-----	14
812	-----	812	0	0	500	-----	-----	yes	"	1	-----	-----	-----	-----	10
458	-----	458	0	0	450	-----	-----	"	"	-----	8	-----	-----	-----	7
390	0	390	0	0	200	-----	-----	no	"	-----	-----	-----	-----	-----	9
598	-----	-----	0	0	no	-----	-----	"	"	1	8 50	-----	-----	-----	10
409	50	409	0	0	450	-----	-----	"	"	1	-----	-----	1	5 00	12
292	-----	292	0	0	400	-----	-----	"	"	2	-----	-----	-----	-----	10
78	22	-----	0	0	no	-----	-----	"	"	-----	8 50	-----	-----	-----	13
292	-----	20	0	0	"	-----	-----	"	"	-----	8 50	-----	-----	-----	10
500	-----	0	0	0	"	-----	-----	"	"	-----	8 50	-----	-----	-----	8
390	-----	390	0	0	350	-----	-----	"	"	8	-----	-----	-----	-----	12
520	-----	240	280	0	no	6 00	yes	"	"	2	1	-----	-----	-----	18
374	-----	-----	*	0	"	-----	-----	no	"	1	*	-----	-----	-----	15
528	-----	527	0	0	"	4 00	-----	"	"	-----	-----	-----	-----	-----	12
130	-----	-----	*	0	0	-----	-----	"	"	-----	*	-----	-----	-----	14
195	75	195	0	0	400	-----	-----	"	"	1	8	-----	-----	-----	12
390	70	-----	0	0	no	-----	-----	"	"	-----	3 25	-----	-----	-----	14
390	100	390	0	0	"	4 00	-----	"	"	-----	8 50	-----	-----	-----	14
1,000	50	400	500	0	"	4 00	-----	"	"	1	-----	-----	-----	-----	9
101	-----	-----	0	0	"	-----	-----	"	"	-----	8 00	-----	-----	-----	15
390	50	390	-----	\$1,000	900	-----	-----	yes	"	1	-----	-----	-----	-----	13
325	-----	-----	*	0	no	-----	-----	no	"	-----	*	-----	-----	-----	13
812	0	-----	0	0	"	-----	-----	"	"	-----	8 50	-----	-----	-----	14
478	-----	-----	0	0	"	-----	-----	"	"	-----	8 50	-----	-----	-----	10
523	25	-----	0	100	"	-----	-----	"	"	-----	8 50	-----	-----	-----	13
101	-----	-----	*	0	"	-----	-----	"	"	-----	*	-----	-----	-----	13
101	-----	-----	*	0	"	-----	-----	"	"	-----	*	-----	-----	-----	14
117	-----	-----	*	0	"	-----	-----	"	"	-----	*	-----	-----	-----	13
156	-----	-----	*	0	no	-----	-----	"	"	-----	*	-----	-----	-----	13
485	1,500	485	0	0	1,800	700	-----	yes	"	-----	1	-----	1	5 00	13
65	-----	-----	*	0	no	-----	-----	no	"	-----	*	-----	-----	-----	12
572	-----	300	272	50	no	-----	4 00	yes	"	1	1	-----	-----	-----	13
647	-----	547	0	0	"	-----	4 00	no	"	1	-----	-----	1	5 00	14
361	0	361	0	0	"	-----	4 00	"	"	-----	-----	-----	-----	-----	15

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	Causes for loss of time.	Wages received.	
Cabinet-maker..	26	Michigan	U. S.	m	10	0	3	4	3	no work	\$1 50 d	
Teamster.....	32	Germany	Germany	m	10	1	4	4	2	not answered	8 10 w	
Machine hand..	19	Michigan	U. S.	s			0	4	3	not answered	1 75 d	
Sawyer.....	35	"	"	s			0	4	3	not answered	1 75 "	
Machine hand..	25	Holland	Holland	s			0	4	2	not answered	1 75 "	
Packer.....	17	Michigan	U. S.	s			0	5	5	no work	10 00 w	
Trimmer.....	28	Norway	Sweden	s			0	12	2	not answered	1 50 d	
MANISTEE M'FG CO. MANISTEE.												
Packer.....	17	Michigan	U. S.	s			0	4	1	no work	4 50 w	
Cabinet-maker..	44	"	"	s	4	3	0	1	1	not answered	10 00 "	
Finisher.....	25	Sweden	Sweden	s			0	1	1	no work	6 00 "	
Laborer.....	39	Norway	Norway	s	2	1		1	1	not answered	1 42 d	
Laborer.....	16	Michigan	U. S.	m				m	12	not answered	50 "	
Machine hand..	17	Denmark	Denmark	s					12	cut hand	1 25 "	
"	22	Germany	Germany	s					1	no work	1 58 "	
Gluer.....	17	Michigan	U. S.	s				m	2	not answered	75 "	
Finisher.....	27	Sweden	Sweden	s				m	3	sickness	1 25 "	
Packer.....	47	New York	U. S.	s	8	3		m	8	no work	10 00 w	
Machine hand..	17	Norway	Norway	s					1	"	1 00 d	
"	19	"	"	s				8m 12		not answered	1 00 "	
General work..	15	Michigan	U. S.	s				1 12		not answered	50 "	
Watchman.....	43	Canada	Canada	s	5	5		1m 11	7	sickness	10 00 w	
Varnisher.....	24	Holland	Holland	s				2m 11	26	various causes	15 00 "	
Laborer.....	15	Penn.	England	s				m	11	shop closed	50 d	
Varnisher.....	23	Mass.	"	s				2m 9	78	no work	10 00 w	
Packer.....	14	Ohio	U. S.	s				8m 11	25	sickness	50 d	
Cabinet-maker..	38	Scotland	Scotland	s	2	1		17m 8	104	no work	12 00 w	
"	19	Sweden	Sweden	s				m	4m 8	"	9 00 "	
Machine hand..	18	Michigan	U. S.	s				m	2m 8	91	"	75 d
"	17	W. Va.	England	s	2	0		1 11	8	not answered	85 "	
Cabinet-maker..	28	Denmark	Denmark	s	2	1		1 11	6	sickness	12 00 w	
"	34	"	"	s	2	1		1 11	13	no work	1 50 d	
Machine hand..	30	"	"	m	1	0		1 11	7	not answered	1 35 "	
Packer.....	38	Penn.	U. S.	m	2	1		8m 9	78	no work	6 00 w	
Finisher.....	14	Michigan	"	s				1 8		first work	75 d	
Millwright.....	39	New York	"	m	0	0		1 11	6	shut down	2 50 "	
Teamster.....	37	Sweden	Sweden	m	0	0		1 12		not answered	26 00 m	
Engineer.....	25	Michigan	U. S.	m	0	0		1 11	6	not answered	16 15 w	
Filler.....	18	Sweden	Sweden	s				m	11	no work	1 00 d	
Finisher.....	22	Canada	Canada	s				2m 11	12	not answered	2 50 "	
Helper.....	16	Michigan	U. S.	s				m	9	no work	2 56 w	
Filler.....	15	"	Denmark	s				m	8	"	75 d	
Sander.....	16	"	Germany	s				1m 12		not answered	50 "	
Superintendent.	40	Mass.	U. S.	m	8	3		1 12		not answered	125 00 m	
Machine hand..	40	Michigan	"	m	2	1		2m 11	6	not answered	1 50 d	
Sander.....	16	Germany	Germany	s				m	11	"	85 "	
Machine hand..	30	Michigan	U. S.	s				7m 10	39	no work	1 40 "	
"	35	Sweden	Sweden	m	4	2		2m 11	13	not answered	1 25 "	
"	14	Michigan	England	s				m	12	"	50 d	
Bench hand..	24	"	U. S.	s				2 11	7	not answered	1 50 "	
Yard hand.....	21	Norway	Norway	s				1 11	7	"	1 40 "	
"	42	Sweden	Sweden	m	3	0		m	11	no work	1 25 "	

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, in value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
2300		2250	1140	0				yes	none	1							12
420		421	0	0	300			no		1							8
600			0	0	no			"		2			3 50				13
540			0	0	0			"		1			3 50	\$1,000			14
640			0	0	"			"		1			3 50				12
480			0	0	"			"		1			3 00				15
420	30		0	0	"			"		1			3 50				10
117			0	0	"			"					3 50				10
600		500	0	0	"		35 00	yes	"				3 50				12
806	30		0	0	"		8 00	no	"				3 50				16
432		423	0	0	"			yes	"				*				15
156			0	0	"			no	"								16
326	31		0	0	"			"	"				3 00				15
424			50	0	"			"	"				3 50				16
234			0	0	"			"	"				3 00				10
366	50		0	0	"			"	"				3 25			5 00	16
325		325	0	0	700	cont.		yes	"								8
278	0		0	0	no			no	"				3 00				10
312	0		0	0	"			"	"				3 00				12
156			0	0	"			"	"	1	2		*				13
500	0	300	0	0	"		8 00	yes	"								12
716	0		0	0	"			no	"				4 00				15
168			0	0	"			"	"				*				12
300			0	0	"			"	"	1	2		4 00				16
148			0	0	"			"	"				*				11
416	336		200	50	1,000	\$300	7 00	yes	"	1			3 25				15
312	0		0	0	no			no	"								17
106			0	0	"			"	"				2 00				18
250			0	0	"			"	"				*				12
611	56	611	0	0	"		5 00	yes	"	1	1						7
448	0	448	0	0	"		8 00	"	"	1	1						13
412	50	412	0	0	500			no	"								14
284		284	0	0	900	50	5 00	"	"	1	2						9
156			0	0	no			"	"				*				14
762		762	0	0	"		12 00	yes	violin	1	2						14
432	0	412	0	0	"		5 00	no	none								12
821		820	0	50	"		5 00	"	"	1	2						12
296	0		15	0	"			"	"				3 25				12
448			0	0	"			"	"				3 50	300			11
100			0	0	"			"	"				*				14
166			0	0	"			"	"				*				13
156			0	0	"			"	"				*				12
1,500		1,000	300	0	5,500		16 67	yes	"	1	2			2,000			20
458		458	0	0	no		5 00	"	"					2,000			14
198			0	0	"			no	"				*				15
384		382	0	0	"		8 00	yes	"								15
874	0	374	0	0	300			"	"								10
156			0	0	no			no	"				*				13
458			50	50	"			"	"				4 00				15
428	0		0	0	"			"	"				3 50				12
366	0	366	0	0	"		7 00	"	"								12

* Gives wages to parents and lives at home.

TABLE NO. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
ST. JOHN'S MANF'G CO., ST. JOHNS.													
Finisher	30	England	England	m	1	0	2	1/2	1/2	6	—	not in U. S.	1 00 d
Machine hand	30	New York	U. S.	m	1	0	2	9	2m	12	—	—	1 25 " "
Table-maker	17	"	"	m	—	—	0	1	1	11	25	shut down	4 00 w
Finisher	30	Ohio	"	s	4	0	5	15	7	11	25	vacation	10 00 "
Cabinet-maker	47	England	England	m	1	1	2	18	14	11	25	shut down	1 60 d
Laborer	22	Canada	"	s	—	—	0	11	1 1/2	11 1/2	19	sickness & no work	1 25 "
Finisher	30	Michigan	U. S.	s	—	—	1	3	3	11	25	sick & vacation	1 20 "
Machine hand	35	"	"	m	5	5	6	2	1 1/2	11	25	shut down	1 25 "
"	31	New York	"	m	0	0	1	4	4	10	52	sick & shut down	1 25 "
Packer	17	Michigan	England	s	—	—	0	1/2	1/2	12	—	—	75 "
Table-maker	24	New York	U. S.	s	1	—	0	1m	1m	12	—	—	1 20 "
Laborer	39	Michigan	"	m	1	0	2	4	4	12	—	—	30 00 m
"	47	"	"	m	5	0	3	1	1	11 1/2	18	bad weather	1 25 d
Teamster	45	Ohio	"	m	1	1	2	5w	10	11	25	no work	1 25 "
Gluer	21	Switz.	Switz.	s	—	—	0	3	3	11	25	shut down	1 25 "
Table-maker	31	Michigan	U. S.	s	—	—	0	2	2	11	25	—	1 25 "
Machine hand	19	"	"	s	—	—	0	1	1	8	104	no work	1 25 "
Time-keeper	16	"	Canada	s	—	—	0	3	3	12	—	—	75 "
Shipping clerk	22	New York	U. S.	s	—	—	0	3	3	12	—	—	1 75 "
Fireman	37	Michigan	"	m	3	3	4	20	7m	12	—	—	1 60 "
Engineer	35	New York	"	m	3	2	5	17	1/2	12	—	—	75 00 m
Finisher	30	Michigan	"	s	—	—	0	4	3	10	52	shut d'wn & laid off	1 20 d
Machine hand	19	"	"	s	—	—	0	4	4	11	25	shut down	1 25 "
Fireman	38	Ohio	"	m	7	8	8	1/2	1	12	—	—	1 25 "
Polisher	15	Michigan	"	s	—	—	0	1	1	9 1/2	65	accid't & shut do'n	1 00 "
Finisher	33	Canada	Scotland	m	1	0	2	1/2	1/2	12	—	—	1 45 "
"	20	Germany	Germany	s	—	—	0	2m	2m	12	—	—	1 00 "
Laborer	31	Michigan	U. S.	s	—	—	0	1/2	1/2	6	156	not answered	1 25 "
Finisher	19	"	Switz.	s	—	—	0	2 1/2	2 1/2	10	52	shut down	1 00 "
Machinist	41	Penn.	U. S.	m	5	2	7	25	2 1/2	8	104	sickness	1 63 "
Packer	31	Michigan	Germany	m	1	0	2	2	2	12	—	—	7 50 w
Cabinet-maker	37	"	U. S.	m	1	1	2	18	1/2	12	—	—	2 15 d
Laborer	41	"	"	w'r	1	0	1	18	18	11 1/2	18	bad weather	1 25 "
Cabinet-maker	19	"	Ireland	s	—	—	0	4	4	11	25	shut down	1 25 "
Laborer	22	New York	U. S.	s	—	—	0	1	1	11	25	—	1 25 "
Packer	25	Michigan	"	m	1	0	2	3	3	11	25	—	1 25 "
Cabinet-maker	29	Ohio	"	s	—	—	1	15	15	11	25	—	10 60 w
Machine hand	23	Michigan	Ireland	s	—	—	0	13	4	9 1/2	65	vac'n & shut down	1 60 d
"	21	Ohio	U. S.	s	—	—	0	5	5	6	156	dissatisfied	7 50 w
Turner	20	Michigan	"	s	—	—	0	2	2w	12	—	—	14 00 "
Machine hand	32	"	"	s	—	—	0	6	13	10	52	shut down	1 50 d
"	15	"	"	s	—	—	0	1/2	1/2	12	—	—	75 "
"	23	"	"	s	—	—	0	6	1/2	12	—	—	1 75 "
Table hand	16	"	"	s	—	—	0	1/2	1/2	6	—	—	80 "
Laborer	58	Ireland	Ireland	m	8	0	1	8	13	11	25	first work	1 00 "
Machine hand	28	Michigan	U. S.	s	—	—	0	2	2	10	52	—	1 25 "
"	30	"	Ireland	s	—	—	0	2m	2m	12	—	—	1 00 "
"	42	"	U. S.	m	5	3	6	8m	8m	8	104	not answered	1 50 "
"	30	Indiana	"	s	—	—	0	1	1	13 1/2	39	sick'n's & shut d'wn	1 12 "
"	42	Canada	England	m	3	2	4	12	12	9	75	—	1 62 "
Hinging tables	24	Michigan	U. S.	s	—	—	1	2m	2m	12	—	—	9 00 "
Machine hand	26	Mass.	"	s	—	—	0	3	14m	11 1/2	18	vacation	9 00 "
"	22	Michigan	"	s	—	—	0	1 1/2	1 1/2	10 1/2	39	shut down & vac'n	1 25 d
"	29	"	"	m	0	0	1	12	9	11	25	shut down	1 35 "

TABLE NO. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No of newspapers and magazines taken.	If boarding cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$156	\$10	\$156	0	0	no			no	none						12
390		860	\$30	0	\$750	\$600		yes	"	1	1		1	\$3 50	9
191				0	no			no	"		*				16
477		877	100	0	800	300		yes	"	1	1	\$2,000	1	8 70	15
429	150	279	150	0	425	250		"	"	1	1	2,000	1	4 50	13
366			0	0	no			no	accord		\$3 00		1	2 75	12
372		872	0	0	1,000	850	\$4 00	yes	none	1			1	3 00	12
387		500	0	0	no			yes	guitar	1	2				15
325		300	* 0	0	no			no	none		*		1	8 75	12
284				0						4			1	1 85	14
408			200	\$1,000	"			"	"	1	3 00				14
380		200	65	0	800	470		"	"						13
374		874	0	0	1,350	500		yes	"	1	1				14
387		250	0	0	600		5 50	"	"		1				15
387	700		150	0	no			no	"		2 00		1	3 75	16
357			0	0	"			"	"	1	2 00		1	3 75	12
280			0	0	"			"	"		3 00		1	3 75	10
234			150	0	"			"	"		3 00		1	2 25	12
546			300	0	1,700	700		"	"	1	5 00		1	5 25	12
612		300	150	0	1,000	490	7 00	yes	"	2					10
900		600	0	0	no		12 00	"	"	1		2,000			14
312			0	0	"			no	guitar	1	3	†	1	3 75	12
367			0	0	"			"	none		2 00		1	3 75	16
540		800	0	0	"		5 00	yes	"		2 75		1	3 00	14
247			0	0	"			no	"						
452	0	852	100	0	1,000			yes	"	1					10
312			0	0	no			no	"		2 00				10
195			* 0	0	"			"	"		2 00	1,000			14
289				0	"			"	"	2	*		1	2 00	16
338		822	0	0	1,300	100		yes	"	1	3	1,000	2	7 00	12
380		200	175	0	no			"	organ	1	1	2,000	1	1 85	12
702		450	100	280	"		7 00	"	none	1	1				13
374		224	150	0	800	112		"	"	1	1	2,000			16
357			100	0	no			no	cl'rionet	1	2	3 00	1	3 75	15
357			0	0	"			"	none	1		2 50	1	3 75	11
357		357	0	0	"		5 00	"	"				1	3 00	17
500			150	0	"			"	"	1	5 00	2,000	1	6 00	14
370			0	0	"			"	"		†				15
195			75	0	"			"	banjo	1			1	3 75	10
728			25	175	"			"	none		2 50				15
390			75	180	"			"	"		3 00		1	4 50	13
234			0	0	"			"	"				1	2 25	8
546			0	0	"			"	cornet		2 50		1	5 00	17
78			0	20	"			"	none				1	1 50	16
286	250	250	20	0	420	250		"	"				1	3 00	16
325			200	0	1,000	800		"	"		3 00		1	4 75	10
312			0	0	no			"	"		2 50		1	4 50	14
312		300	0	1,300	"			yes	organ	2	1		1	4 50	8
307			0	0	"			no	none		3 00		1	3 37	8
330	0	275	75	0	800	120		yes	organ	1		1,000	1	5 00	10
468			100	0	500			no	none		3 00				9
448			150	0	no			"	"	1	3 00		1	4 50	16
841			0	0	"			"	"		2 50				18
386		180	165	0	800	270		yes	"		1		1	3 50	8

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	In the year. No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Machine hand.	26	Michigan.	U. S.	m		26	shut down	\$1 25 d
Joiner.	25	New York.	"	m		45	sickness, shut do'n	1 25 "
Engineer.	38	"	England	m		7	sick and vacation	1 75 "
Machine hand.	23	"	U. S.	s				1 25 "
"	27	Ohio	"	m		26	shut down	1 25 "
"	18	"	"	s		52	sick and shut dwn	1 00 "
"	36	New York	"	m		39	vacat'n-shut d'wn	1 25 "
Turner.	39	England.	England	m		52	shut down	12 00 w
Sand-paperer.	23	"	"	s				1 00 d
Machine hand.	41	Ohio	U. S.	m		26	shut down	9 00 w
"	18	England	England	s				75 d
Gluer.	41	U. S.	U. S.	m		26	shut down	1 25 "
Machine hand.	24	Michigan.	"	m				1 00 "
Sand-paperer.	24	Ohio	"	s		26	shut down	1 00 "
Gluer.	28	Michigan	"	m				7 50 w
"	37	New York	"	m		26	sick and shut d'wn	8 00 "
Lumber sorter.	25	Michigan	"	s		26	shut down	1 00 d
Machine hand.	34	Ohio	"	s		26	"	1 75 "
Tin ner.	30	Penn.	"	m		78	"	14 00 w
Filler.	14	Michigan	"	s		52	sick and shut d'wn	12 00 m
Machine hand.	21	"	Germany	s		26	shut down	1 25 d
Joiner.	29	Canada	Canada	m		52	"	8 00 w
Sorter.	23	Ohio	U. S.	m		26	"	1 25 d
Machine hand.	23	"	"	m				1 25 "
Laborer.	30	Michigan.	"	m		26	no work	1 25 "
Machine hand.	17	"	"	s		39	no wrk & vacation	88 "
"	30	"	"	s		26	shut down	1 25 "
Drayman.	30	"	"	w'r		13	sickness	1 50 "
Machine hand.	18	"	Ireland	s		26	shut down	1 12 "
Turner.	57	New York.	U. S.	m		62	"	12 00 w
Machine hand.	37	"	"	s				1 25 d
Foreman.	22	England.	England	m		13	sick and vacation	2 00 "
Machine hand.	36	Michigan.	U. S.	m		26	shut down	1 80 "
"	23	"	Ireland.	s		26	"	1 60 "
"	23	"	"	s				1 25 "
Turner.	27	New York.	"	s		26	shut down	1 75 "
Foreman in yard.	23	Michigan.	U. S.	m		13	wedding trip	2 30 "
Machine hand.	39	"	"	m		78	no work	1 25 "
"	37	Canada	"	m				1 25 "
C. D. STUART, OTSEGO.								
Chair-maker.	34	Michigan.	"	m				7 50 w
"	30	"	"	w'r		26	sickness	7 50 "
"	18	Ohio	"	s		104	at school	5 50 "
"	34	New York.	England	m				7 00 "
"	40	Michigan.	U. S.	m				11 00 "
"	44	Ohio	"	m		26	sickness	7 50 "
Painter.	34	Michigan.	"	s				5 50 "
Sawyer.	22	"	"	s		26	vacation	8 50 "
Wood worker.	39	Ohio	"	m		13	personal work	6 50 "
Chair-maker.	21	Michigan.	"	m				6 00 "
"	48	Ohio	"	m				10 00 "
Painter.	50	Germany.	Germany	w'r		8	personal business	7 00 "
Chair-maker.	23	Scotland.	Scotland	s		8	vacation	7 50 "
"	49	Ohio	U. S.	m		39	sickness	8 75 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
3367		\$200	\$75	0	\$400	\$325		yes	none		1			\$1,000	1	\$3 75	15
433		320	0	0	no			no	violin		1						14
535		535	0	0	600	592		no	organ		2	1		2,000	1	6 00	16
390			0	0	no			no	violin				\$3 50				8
367		185	125	0	1,000	800		no	none		1				1	3 75	8
260			80	0	no			"	organ				2 50		1	3 00	15
341		300	0	0			\$8 00	yes	none		1				1	3 75	16
520	\$120	520	0	0	960	890		no	cornet		1	1					8
312	75		0	0	no			no	none				8 50	2,000			14
429		275	100	\$200	700	360		yes	organ		1	1		1,000	1	5 00	8
234	8		0	0	no			no	none				3 00			4 50	14
367		300	0	0	"		5 00	yes	organ		1						14
312		300	0	0	"		7 00	no	none								12
236			20	0	"				"				2 50				10
380		250	140	0	"		4 00	yes	"								14
381		350	0	0	"		5 00	"	"		1			1,000	1	3 75	15
236		150	0	0	250	135		no	"						1	3 00	15
500		400	100	0	1,600	700		"	"			3					14
546		546	0	0	660	620		yes	"								10
120			0	0	no			no	"				2 50				13
386			35	0	"			"	organ		2		2 50		1	3 50	14
347		280	75	0	300			yes	violin		1	1					13
367		285	60	0	500	400		no	none		1	1					8
390		250	125	0	no		5 40	"	"		1	1					11
367		300	50	0	"		4 00	"	"			2		2,000			10
327			*	45	"			"	"				*		1	2 90	15
367			100	260	"			"	"						1	3 00	17
448			100	0	800	400		"	"				2 50		1	4 50	14
322			0	50	no			"	"				2 00		1	3 37	13
712		600	0	0	"		9 00	yes	"		1	1			1	7 00	11
390			0	0	"			no	violin		2		2 50				15
598		400	175	0	700	470		no	"						1	6 00	8
655		400	100	0	no		7 00	yes	"		1	1			1	5 40	13
458		350	100	0	700	200		no	"			1			1	4 65	8
390			0	0	no			"	"				2 00				13
500		320	180	0	1,000	800		yes	organ		1	1			1	2 00	14
747		277	470	450	2,000	1,500		"	none		1	1			1	6 00	12
367		255	0	0	no		7 00	"	organ		1			200	1	3 75	10
390		390	0	0	400			"	none			1			1	2 50	13
490		490	0	400	no		6 00	"	accord			2		1,000			10
367			0	0	"			no	none				5 00				21
191			20	0	"			"	"		1		2 00				14
489		200	150	0	700			yes	"			2	1				7
572		150	200	0	1,800			"	"			8	1	1,000			19
367		367	0	400	800			"	"			2					12
236			50	50	no			no	"				3 00				12
405			200	700	"			"	"				2 50				15
324		300	0	0	1,200			yes	"		1						21
312		312	0	0	no			no	"			1	3 00				15
520		520	0	0	"		6 00	yes	organ			3					21
356	100		100	2,000	"			no	none		3	2	3 00				25
322		257	125	100	800			"	"		3						7
396		396	0	0	350			yes	organ		1			2,000			17

* Gives wages to parents and lives at home.

TABLE No 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	No. of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Chair-maker.....	38	New York	U. S.	m	4	2	5	6	8	11½	6	shut down	\$7 00 w
Sawyer.....	19	Michigan	"	s	—	—	0	2	2	11½	18	vacation	5 50 "
Foreman.....	30	Ohio	Ireland	m	1	1	2	11	1m	13	—	—	7 00 "
Chair-maker.....	21	New York	U. S.	m	1	0	2	27	9½	13	—	—	18 00 "
Painter.....	19	Michigan	"	s	—	—	2	5m	5m	12	—	—	7 50 "
Chair-maker.....	19	Michigan	"	s	—	—	0	2	3w	11	26	sickness	5 00 "
Machine-hand.....	24	Ohio	"	m	0	0	0	7	6w	12	—	—	6 50 "
Bender.....	52	"	Germany	s	—	—	1	1½	1½	11½	18	sickness	7 00 "
Chair-maker.....	26	Michigan	"	m	1	0	0	2½	2½	11	26	vacation	6 00 "
Turner.....	42	"	U. S.	m	0	0	1	2	2	11½	6	sickness	6 00 "
Laborer.....	29	"	"	m	2	1	2	9	6	9	76	"	7 50 "
Varnisher.....	21	"	Ireland	m	2	1	3	10	6w	12	—	—	7 50 "
Painter.....	16	Ohio	Holland	s	—	—	0	5	10m	11½	18	sickness	8 00 "
Rubber.....	26	Michigan	U. S.	s	—	—	0	5	½	11½	18	vacation	7 50 "
Packer.....	19	Indiana	"	s	—	—	0	1	1	10	52	sickness	4 00 "
Chair-maker.....	35	Michigan	"	m	2	1	3	2	3	11½	18	"	8 50 "
Chair-maker.....	37	Michigan	"	s	—	—	0	8m	8m	10½	39	"	6 00 "
Laborer.....	30	Ohio	Germany	s	—	—	0	2	2m	11	26	vacation	5 50 "
Packer.....	23	New York	U. S.	m	1	1	2	6	8	10½	39	sickness & per'l wk	8 50 "
Shipping-clerk.....	28	Michigan	U. S.	m	1	1	2	7½	7½	9½	59	sickness	8 00 "
Painter.....	40	Canada	Germany	m	0	0	1	14m	14m	11	26	vacation & no wrk	7 50 "
Chair-maker.....	36	Michigan	U. S.	m	5	3	0	1	1	11	26	vacation	7 00 "
Teamster.....	40	New York	"	m	6	2	7	2½	2½	11½	18	sickness	8 50 "
Chair-maker.....	26	England	England	m	3	3	1	20	13	11	26	vacation	18 00 "
"	30	Michigan	U. S.	s	—	—	6	1½	1½	11½	18	sickness	7 50 "
"	35	New York	"	m	1	1	2	6	6	11½	18	sickness	7 50 "
"	31	Ohio	"	m	2	2	3	4½	4½	10½	45	person'l busin's	9 50 "
"	19	Michigan	Scotland	s	—	—	0	2	2	11	26	personal work	6 50 "
"	26	"	U. S.	m	0	0	—	—	6w	10	52	base ball	7 50 "
"	22	"	"	s	—	—	—	—	2½	10	52	shut down & vac'n	7 00 "
Turner.....	40	New York	"	m	4	2	—	—	6	11½	12	shut down	7 50 "
Chair-maker.....	19	Michigan	England	s	—	—	—	—	14m	11	26	sickn's & no wk	10 00 "
Turner.....	32	Maine	U. S.	m	2	0	—	—	5	10	52	"	6 50 "
Chair-maker.....	27	Michigan	"	m	1	0	—	—	4	11½	19	no work	8 00 "
"	39	New York	Germany	m	5	2	—	—	½	1½	13	vacation	7 50 "
"	39	Michigan	U. S.	m	1	1	—	—	11	11½	6	sickness	7 00 "
"	39	New York	"	m	3	2	—	—	18	11½	18	shut down	10 50 "
"	28	Vermont	"	m	0	0	—	—	9	10	52	sickness	10 50 "
Turner.....	34	Ohio	"	m	3	2	—	—	14	10	52	accident	6 50 "
Wood-worker.....	35	New York	"	m	3	0	—	—	4	10	52	vacation	8 40 "
Carpenter.....	50	"	"	w'r	3	0	1	4½	2m	11½	18	sickness	8 50 "
Chair-maker.....	32	Michigan	"	m	9	0	—	—	8	10	52	accident & sick	10 00 "
"	29	"	England	m	2	0	—	—	4	14	11	sickness	10 00 "
"	47	New York	U. S.	m	8	1	—	—	½	½	11½	sickn's & mov'g	6 00 "
Night watch.....	30	Michigan	"	m	0	0	—	—	1	11	39	sickness	8 50 "
Finisher.....	27	"	"	m	2	0	—	—	½	1½	6	vacation	7 50 "
Chair-maker.....	43	New York	"	m	2	1	—	—	3	3½	11½	base ball	8 00 "
Painter.....	41	Ohio	"	m	1	1	—	—	8	11½	18	sickness	9 50 "
Chair-maker.....	20	Germany	Germany	s	—	—	—	—	2m	11½	18	"	7 00 "
"	20	Michigan	U. S.	s	—	—	—	—	0	1	11	"	5 50 "
Bender.....	38	Indiana	Germany	m	4	1	—	—	0	4½	11	vacation	6 50 "
							5	7½	7½	11½	13	sickness	7 50 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
3556		\$175	\$100	0	\$300			no	none	1	1						25
374			0	0	no					1	1		\$3 00				17
364			0	0	no				cor & vi				3 00				12
998		550	0	0	1,400			yes	organ	4	2						12
390		390	0	0	no		\$3 00		none	1							14
239			0	0	"			no	banjo		1		3 50				14
338			0	0	"				none				3 00				12
349		349	0	0	275			yes	"								10
238			0	0	no			no	"		1		2 00				12
805		305	0	0	600			yes	"		2						21
292		275	0	0	40			no	"								16
390		390	0	0	700			yes	"	1							17
399		399	0	0	no		6 00		"		1						16
374			40	0	"			no	"	1	1		3 00				15
178				0	"				"	1	1						13
438		373	50	0	600			"	organ			2					30
278			0	0	no			"	violin				2 50				11
262			50	0	600			"	cornet	1			2 00				16
387	0	312	75	0	600	\$185		yes	organ		1						10
338		283	75	0	1,000	400		"	"	1	2						22
357		317	40	0	no		5 00	"	none		3						25
334			0	0	no			no	"				3 25				17
425		200	50	0	400	350		yes	"								16
858		750	100	\$300	no		8 00	"	"	1	1	2					12
374		874	0	0	800	125		"	"		1	1		\$1,000			12
416		416	0	0	no		6 00	"	"	1							16
280	\$150	365	0	0	450			no	"		1						14
369			0	0	no			"	violin				2 75				12
433		305	50	0	900			yes	none		1	1					21
422		300	122	1,303	no			no	"		1						16
310			100	0	800			"	"								14
335		200	50	0	no			"	"		3						21
336			0	0	"			"	"								20
374		374	0	0	600			yes	"	1	2		3 00				21
477			0	0	no			no	"	1			3 50		1,000		20
233			60	0	850			"	"		1						12
440		440	0	0	800	400		yes	"		1						18
374		200	100	0	500			no	"		1						20
351		358	0	0	400			yes	organ		1						20
523		498	25	0	no		6 00	"	none		3	1					21
455		405	50	0	600			no	"		2	2					18
407		150	0	0	no		4 00	yes	"		1						14
397		250	100	0	"		4 00	"	guitar		1						15
334		250	0	0	"		3 00	"	none		1						12
433		400	0	0	"		7 00	"	organ		2	1					18
477		350	100	0	700	250		"	none	1							13
299		299	0	0	no		6 00	no	"								20
387		387	0	0	800			yes	organ								17
432		250	150	0	650	300		"	violin		1	1					21
390		250	75	0	450	255		"	none	1	1						16
473		370	0	200	1,300			yes	organ		5	3		2,000			13
319		800	0	0	no		5 00	no	none		1						12
282			0	0	"			"	"		1		2 50				19
310			0	0	"			"	"		1		3 00				15
524		430	85	0	700	414		yes	organ								18

* Gives wages to parents and lives at home.

† Lives at home and pays no stated amount.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	log the year.	No. of days of lost time during the year.	Causes for loss of time.	Wages received.
Turner.....	45	New York.	U. S.	m	0		3	7			32	sickness	7 50 w
Chair-maker.....	19	Michigan.	"	s			1	8			32	base ball	8 00 "
Shaper.....	38	New York.	"	w'r			1	7			19	accident	7 50 "
Chair-maker.....	33	Michigan.	"	m	1		2	11			13	shut down	10 00 "
" ".....	29	"	"	m	1		2				13	vacation	7 00 "
" ".....	14	"	"	s			0				26	sickn's & no wrk	3 00 "
Polisher.....	33	"	"	m	0		1	3			26	vacation	7 00 "
Chair-maker.....	30	"	"	m	0		2	14			39	sickness	8 00 "
Painter.....	40	Germany.	Germany	m	4		3	4			13	vacat'n & no w'rk	7 50 "
Painter.....	45	Michigan.	Canada.	m			4	1			13	no work	6 50 "
Foreman.....	39	"	U. S.	m	3		4	14			13	shut down	10 50 "
Packer.....	23	Ohio.	"	m	0		1	2					8 00 "
Chair-maker.....	32	Michigan.	"	s			1	1			117	sickness	7 50 "
Varnisher.....	15	Indiana.	"	s			1	7			19	vacation	5 00 "
Painter.....	35	Vermont.	"	m	1		2						6 50 "
" ".....	38	Michigan.	"	m	0		1	13			6	moving	7 00 "
Rubber.....	27	"	"	s			0	3			13	sickness & vacat'n	6 00 "
Painter.....	23	"	"	m	0		2	8			26	sickness	6 50 "
Finisher.....	42	Germany.	Germany.	s			0	13			206	no work	6 00 "
Rubber.....	25	Michigan.	U. S.	s			1	4			6	sickness	6 50 "
Painter.....	16	"	"	s			1	1			13	"	4 50 "
Rubber.....	19	"	"	s			0	1			6	"	6 00 "
Striper.....	22	"	"	s			0	6			78	vacation	5 50 "
Grainer.....	25	Ohio.	"	w'd	1		2	2			63	sickness & vacat'n	6 50 "
MUSKOGON VALLEY FURNITURE CO., MUSKOGON													
Cabinet-maker.....	30	Denmark.	Denmark.	m	1		3	3			52	sickn's & no wrk	9 00 "
Sand-paperyer.....	30	Holland.	Holland.	m	1		2	7					1 35 d
Polisher.....	16	"	"	s			0	3					6 00 w
Sawyer.....	20	"	"	s			0	1					7 00 "
Machine hand.....	15	Michigan.	"	s			0	1				first work	6 00 "
Packer.....	23	Denmark.	Denmark.	s			0	14					1 25 d
Rubber.....	23	Holland.	Holland.	m			1	3			52	not answered	9 00 w
Packer.....	33	U. S.	Germany.	m			4	3					10 50 "
Finisher.....	21	"	"	s			0	5					12 00 "
Machine hand.....	23	"	U. S.	s			0	6					9 00 "
Engineer.....	38	Germany.	Germany.	m			5	8					3 50 d
Carver.....	20	U. S.	"	m			1	6					15 00 w
Grainer.....	37	Denmark.	Denmark.	m			4	15					15 00 "
Carver.....	19	Holland.	Holland.	s			0	4			52	sickness	8 00 "
" ".....	21	U. S.	"	s			1	6 1/2	turn, ad				3 50 d
" ".....	23	England.	England.	m			3	17	4	13			3 25 "
Finisher.....	45	Holland.	Holland.	m			5	6	4	13			9 00 w
Carver.....	18	Michigan.	Scotland.	s			0	2	2	13			2 50 "
Finisher.....	14	U. S.	Holland.	s			0	2	2	13			6 00 "
Cabinet-maker.....	15	"	Germany.	s			0	1	1	13			8 00 "
Sawyer.....	26	"	"	s			0	4	2	13			13 00 "
Finisher.....	17	Canada.	Canada.	s			0	1	1	13			4 00 "
" ".....	49	Holland.	Holland.	m			3	5	4	12			9 00 "
Machine hand.....	27	Sweden.	Sweden.	m			2	2	2	12			9 00 "
Cabinet-maker.....	15	"	"	s			0	2	2	12			70 d
" ".....	19	U. S.	Holland.	s			0	2	2	12			6 00 w
Machine hand.....	39	Canada.	U. S.	m			3	2	2	12			8 25 "
Sawyer.....	30	Holland.	Holland.	m			4	6	4	10	52	not answered	9 00 "
Laborer.....	21	"	"	s			0	2	2	9	78	"	7 50 "

TABLE NO. 17.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
333		336	0	0	no		\$5 00	no	none							13
300			0	0	"			"	"	1	1					13
368			300	0	"			yes	organ							13
498		498	0	350	\$650			yes	triangle	1	1					16
349		149	300	0	no		8 00	no	none		1					17
148			25	0	"			"	"							14
484		834	0	0	"		5 00	"	melod.							17
364		300	10.1	0	550	775		"	none							16
290		337	72	0	300			yes	"							17
324		324	0	0	no		4 00	"	"		1					18
523		523	0	0	"		6 00	"	"		1	1				16
416		360	66	0	"		5 00	"	guitar		1					19
244		244	0	0	250			no	none		2	1				12
244		244	0	50	350			yes	"		1					14
338		375	50	0	no		5 00	"	"		1	1				12
306		356	0	0	"		6 00	"	violin	1						13
299			150	75	"			no	"		1					14
310		290	0	0	125			yes	organ			1				12
101	84		0	0	no			no	none							14
331		231	100	0	600			"	"		1					10
224		224	0	0	no			yes	"							13
305			0	0	"			no	"	1						13
314			80	120	"			"	organ							13
238			0	0	"			"	none							23
440	14	440	0	0	400			yes	"	1				1	24 00	14
577		350	53	0	no		5 00	no	"		1					11
312			0	0	"			"	"							13
354			0	0	"			"	"							10
156			0	0	"			"	"		1					14
390	10		0	0	"			"	"							14
390		390	0	0	"		4 00	"	"							10
546		546	0	0	"		6 00	yes	"		1					18
424			0	0	"			no	"		1					16
468			0	0	"			"	"		1					10
780		680	100	0	1,500			yes	"	1	1		2,000	1	18 00	13
780		780	0	0	no		5 00	"	"	1	1		8 00	1	5 00	13
780	25	300	0	0	"		10 00	"	"		1					16
847			0	0	"			no	"							11
780			0	0	"			"	"	1		1	6 50	1	5 00	13
1,014		1,014	0	0	1,300	725		yes	"	2	1		3,000			10
488	0	488	0	0	500			"	"		2					19
130			0	0	no			no	"	1						13
312			0	0	"			"	"							12
156			0	0	"			"	"							14
634			0	0	"			"	"				8 50			11
208			0	0	"			"	"							16
468	300	468	0	0	"		5 00	"	"							21
499	15	400	50	0	900			yes	"		1					10
313			0	0	no			no	"							13
312			0	0	"			"	"	1						17
439	50	439	0	0	"		4 00	yes	"	1						13
390		390	0	0	"		8 00	"	"	1					4 50	12
302			0	0	"			no	"				3 25			15

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Sawyer.....	23	Michigan	U. S.	m	2	0			5m	11	26	not answered	\$2 50 d
Machine hand.....	34	Germany	Germany	s					8w	10	52	no work	2 25 "
Carver.....	17	Michigan	Holland	s					2	12			3 50 w
Cabinet-maker.....	21	U. S.	"	s					2	10½	89	not answered	7 00 "
".....	28	Ireland	Ireland	m	1	0			3	10	52	"	10 00 "
".....	44	Poland	Poland	m	5	3			8	9	78	shut down	9 00 "
Turner.....	26	Michigan	Germany	m	1	0			½	11½	13	invoice & rep'r	13 00 "
Machine hand.....	19	Holland	Holland	s					1½	12			7 50 "
Cabinet-maker.....	17	"	"	s					3	9	76	not answered	8 00 "
Finisher.....	14	Michigan	"	s					1	10	52	"	2 50 "
".....	17	"	Ireland	s					2m	12			10 00 "
Carver.....	25	Holland	Holland	s					3	10	52	not answered	8 00 "
Finisher.....	36	Canada	Canada	m	6	1			3	11	26	"	9 00 "
Cabinet-maker.....	40	Sweden	Sweden	m	4	2			2½	4	78	"	11 00 "
Rubber.....	35	Holland	Holland	s					½	12			6 00 "
Machine hand.....	23	"	"	s					6	12			10 50 "
Finisher.....	18	U. S.	"	s					1m	12			1 25 d
Laborer.....	12	Michigan	"	s					½	8		first work	50 "
Gluer.....	38	Holland	"	m	4	1			5m	12			9 00 w
Laborer.....	15	"	"	s					2	10	52	don't know	3 00 "
Finisher.....	14	"	"	s					2	10	52	not answered	3 60 "
Cabinet-maker.....	28	Denmark	Denmark	m	3	0			5	12			2 25 d
Sawyer.....	21	Canada	Ireland	m	0	0			2	12			9 00 w
Veneerer.....	17	Michigan	Holland	s					4m	10½	89	not answered	1 25 d
Carver.....	16	Holland	"	s					3	12			1 00 "
Carpenter.....	32	U. S.	U. S.	m	3	1			1	12			12 00 w
Cabinet-maker.....	48	Holland	Holland	m	9	4			4	11½	18	not answered	18 00 "
".....	38	Sweden	Sweden	w'r	0	0			4m	12			1 25 d
Machine hand.....	32	Ireland	Ireland	m	2	1			5	10	52	not answered	12 00 w
KELLY BROS. MFG CO., MUSKEGON.													
Sawyer.....	24	U. S.	Germany	m	1	0	2 3		3	12			10 50 "
Finisher.....	26	Germany	"	m	2	0	2 3		3	12			12 00 "
Laborer.....	16	Holland	Holland	s	5		0 1		1	10		first work	50 d
Machine hand.....	24	U. S.	Scotland	m	0	0	1 12		3	12			2 50 "
".....	45	Canada	Canada	m	4	2	0 10		4	10	52	not answered	2 50 "
Sawyer.....	36	Germany	Germany	m	5	3	6 4		4	10	52	"	2 00 "
Machine hand.....	38	Holland	Holland	m	4	1	5 4		4	10	52	"	2 00 "
Cabinet-maker.....	22	U. S.	U. S.	m	0	0	2 12		1	12			11 40 w
Machine hand.....	25	"	"	m	0	0	1 1		1	12			9 00 "
Refrig'r carpt'r.....	19	"	"	s			0 6		6	12			1 00 d
Mechanic.....	39	Ireland	Ireland	m	2	2	3 10		12	12			2 50 "
Carpent'r form'n.....	34	U. S.	Germany	m	3	2	4 4		1½	12			1 75 "
Machine hand.....	28	"	Ireland	s			2 10		4	12			2 50 "
Carpenter.....	23	"	U. S.	s			0 9		5	11	26	vacation	9 00 w
Turner.....	26	England	England	s			0 8		1	12			12 00 "
Finisher.....	34	Ohio	France	w'r	2	2	2 1		7	12			9 00 "
Carpenter.....	24	U. S.	U. S.	s			0 5		2	12			1 90 d
Finisher.....	38	Germany	Germany	m	3	3	4 7		1	12			12 00 w
".....	16	U. S.	Holland	s			0 3		1	12			7 00 "
Carver.....	39	Germany	Germany	s			0 23		7m	10	52	not answered	3 50 d
Trimmer.....	39	"	"	m	4	3	5 2		1½	12			10 50 w
Foreman.....	42	U. S.	U. S.	s	1	1	2 20		5	12			2 00 d
Laborer.....	14	"	Holland	s			0 4m		4m	4		first work	8 00 w
Cabinet-maker.....	60	"	U. S.	m	2	1	3 2		2	12			15 00 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$715		\$615	\$100	0	no		\$8 00	yes	none	1	1		\$4 00	\$1,250	1	\$4 00	17
585			0	0	"			no	"								14
182			*	0	"			"	"								13
318			0	0	"			"	"								14
433		433	0	0	"		5 00	yes	"	1		1	8 50				13
851	\$5	500	0	0	\$500			no	"		1						14
897		897	0	\$50	no		9 00	"	cornet					2,000			14
380			0	0	"			"	none	1			4 00		1	5 00	14
234			0	0	"			"	"				8 00				12
108			*	0	"			"	"				*				13
520			*	0	"			"	"			1	*				13
847			0	0	"			"	"			1	4 00				12
429		429	0	0	600			"	"								13
429		375	54	0	1,500	350		yes	"		1					4 50	10
312			0	0	no			no	"				4 00				12
546			0	0	"			"	banjo	1	6		5 00				12
390			*	0	"			"	none				*				12
39			*	0	"			"	"				*				12
468	50	468	* 0	0	600			yes	organ	1	1		*				12
180			*	0	no			no	none				*				13
156			*	0	"			"	"				*				12
702	5	330	250	0	800	200		yes	"		1	1		1,000	1	4 00	14
468		390	0	0	no		5 50	no	"	1	1	1	*				16
841			*	0	"			"	"				*				14
312			*	0	"			"	"				*				12
824		824	0	0	600			yes	"	1	2	1					25
808		897	0	0	no		10 00	"	organ	1							14
390			0	0	"			no	none	1	1		8 25		1	4 50	12
520		520	0	0	1,000			"	"	1							13
546		546	0	0	no		8 00	"	"		2						18
824	150	624	0	0	"		8 00	yes	"		1		*	1,000	1	4 00	15
130			*	0	"			no	"								14
780		780	0	0	"			no	"	2		2					16
460		650	0	0	600			yes	"		1				1	4 00	12
520		520	0	0	no		6 00	no	"		1						12
570		570	0	0	no		5 00	"	"						1	4 00	14
542		592	0	0	800			yes	"	1	1						19
468		468	0	0	no		8 00	"	"	1					1	5 00	16
312			0	0	no			no	"	2			5 00		3	15 00	10
780		250	0	0	1,800			yes	"	1	1			1,000	2	25 00	18
848		300	0	0	800			"	"								18
780		350	0	0	no		10 00	"	"	1	1						15
429			75	0	"			no	"				5 00		1	4 00	16
624			150	0	"			"	"		1		4 00		1	4 00	18
468			100	0	800	400		yes	"		1		3 50				13
583		150	150	0	no			no	"				4 50				15
824	110	250	0	0	700	200		yes	"	1	2			2,000	1	5 00	14
364		*	0	0	no			no	"				*				10
910		200	0	0	"			no	"	1		2	4 50		1	6 00	17
546		546	0	0	"		7 00	yes	"		2				1	4 00	16
928		350	0	150	2,500			"	"	1	2	1		3,000	2	25 00	20
52		*	0	0	no			no	"				*				13
780		780	0	0	3,000			yes	piano	3	2	1					17

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	No. of children attending school.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.		
Sander	16	U. S.	Germany	s	3	1	3	12			\$3 80 w		
Finisher	21	"	U. S.	m	3	1	1	12			16 50 "		
Rubber	15	"	Germany	s			1	12			7 00 "		
Packer	21	"	U. S.	s			3	12			9 00 "		
Foreman	26	"	"	s			4	12			2 50 d		
CRESCENT FURNITURE AND MFG'G CO., BIG RAPIDS													
Machine hand	26	Indiana	U. S.	s	7	6	1/2	21	104	shut down	2 00 "		
Roll-maker	46	Mass.	France	m	7	6	6	1	26	various causes	1 25 "		
Cabinet-maker	54	Ohio	U. S.	m	4	0	2	1	26	shut down	1 50 "		
Laborer	20	Michigan	"	s			1/2	1			1 00 "		
Cabinet-maker	50	Germany	Germany	m	7	1	1	1	52	shut down	1 50 "		
Helper	18	Michigan	U. S.	s			m	21		first work	50 "		
Turner	21	"	England	m	1	0	2	2	26	shut down	1 75 "		
Machine hand	21	"	Ireland	s			2	2	26	"	1 75 "		
"	20	Iowa	U. S.	m	3	0	2 1/2	1			1 00 "		
"	22	Michigan	"	s			2	1	52	shut down	2 00 "		
"	23	Ohio	"	s			2	1	52	"	1 50 "		
Finisher	22	Canada	Ireland	s			1 1/2	1	26	"	1 50 "		
Cabinet-maker	29	Penn.	U. S.	m	1		w	3 1/2			1 00 "		
Packer	41	England	England	m	3	1	1/2	1	156	no work	1 00 "		
Finisher	24	Michigan	U. S.	m	0	0	2		26	shut down	1 50 "		
Cabinet-maker	30	Sweden	Sweden	m	0	0	2	11	26	"	2 00 "		
"	21	Michigan	Germany	m	0	0	1 1/2	11	26	"	2 00 "		
"	41	Ohio	"	m	3	3	1	11	26	"	2 00 "		
Finisher	25	Illinois	U. S.	s			1	11	26	"	1 00 "		
Mechanic	48	New York	"	m	3	3	2	12			2 00 "		
Finisher	27	Michigan	Germany	m	0		1	11	26	shut down	1 25 "		
"	20	Germany	"	s			1/2	1	26	"	1 00 "		
"	21	Michigan	U. S.	m	0	0	1	11	26	"	1 00 "		
"	15	"	Sweden	s			w	2w		first work	50 "		
"	26	Penn.	U. S.	s			2w	12			1 00 "		
"	18	Germany	Germany	s			1	11	26	shut down	1 00 "		
"	16	Michigan	U. S.	s			m	1m	1	first work	50 "		
Machine hand	20	Canada	Canada	s			1/2	6	156	no work	1 50 "		
Finisher	32	Mass.	U. S.	m	2	1	2 1/2	11	26	shut down	88 28 m		
"	16	Michigan	"	s			0	1	26	"	85 d		
"	17	Germany	Germany	s			0	2	26	"	1 00 "		
"	26	Sweden	Sweden	s			0	5	26	"	1 50 "		
Machine hand	32	Michigan	England	m	2	0	3	2	26	"	1 50 "		
Bracket-turner	14	Ohio	U. S.	s			0	1	26	"	50 "		
Cabinet-maker	23	Canada	England	m	2	0	3 1/2	2m	10	"	1 75 "		
"	33	Sweden	Sweden	m	0	0	1	1/2	6	156	no work	1 25 "	
Machine hand	28	Indiana	England	s			1	2	11	shut down	1 75 "		
Carver	18	Michigan	Germany	s			0	1	9	"	1 00 "		
Trimmer	49	"	U. S.	m	3	1	2	2	11	"	2 00 "		
Laborer	30	Sweden	Sweden	s			0	3	9	no work	1 00 "		
Carver	21	England	England	s			0	7	1w	11	shut down	1 50 "	
Engineer	29	Denmark	Denmark	m	3	2	4 1/2	2	12		2 12 "		
Laborer	39	Sweden	Sweden	m	3	1	4	3	1/2	8	104	no work	1 00 "
Cabinet-maker	30	Ohio	U. S.	m	1	1	2	1/2	1/2	9	78	shut down	10 00 w
"	24	Germany	Germany	s			0	4	14m	11	26	"	1 75 d
Machine hand	21	Holland	Holland	s			0	5	1 1/2	10	52	"	1 75 "
Cabinet-maker	15	Michigan	Holland	s			0	1/2	1/2	8		first work	50 "
Machine hand	34	Canada	Scotland	m	0		1	16	1/2	8	104	no work	2 00 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$187	* 0	0	no	.....	.....	no	none	Daily papers.	Weekly papers.	Magazines.	.....	.....	.....	.....	12
546	\$546	* 0	0	"	.....	\$5 00	yes	organ	1	1	.....	.....	.....	.....	.....	27
364	* 0	0	"	.....	no	no	"	.....	.....	.....	.....	.....	.....	.....	14
468	0	"	.....	.....	"	"	.....	.....	.....	.....	.....	.....	.....	16
780	0	\$500	"	.....	.....	"	"	.....	.....	.....	\$5 00	.....	.....	.....	16
416	0	100	"	.....	.....	"	"	.....	.....	.....	4 00	.....	.....	.....	15
357	357	0	0	"	.....	6 00	yes	organ	1	1	1	\$2,000	.....	.....	.....	9
429	400	0	0	\$400	.....	6 50	no	none	1	1	.....	.....	.....	.....	.....	14
312	300	0	0	no	.....	5 00	"	"	1	2	.....	.....	.....	.....	.....	10
360	0	360	0	0	"	.....	.....	"	"	1	.....	.....	.....	.....	.....	.....	9
26	0	0	"	.....	.....	"	"	.....	.....	.....	2 00	.....	.....	.....	13
500	500	0	0	"	.....	.....	"	"	.....	.....	.....	5 00	.....	.....	.....	13
500	400	0	0	"	.....	6 00	"	"	.....	.....	.....	.....	.....	.....	.....	13
312	350	0	0	"	.....	5 00	yes	piano	2	7	.....	.....	.....	.....	.....	15
530	\$75	0	"	.....	5 00	no	none	.....	.....	.....	4 00	.....	.....	.....	16
390	0	0	"	.....	.....	"	"	.....	.....	.....	3 50	.....	.....	.....	16
429	40	0	0	"	.....	.....	"	"	.....	.....	.....	4 00	.....	.....	.....	15
312	300	0	0	825	\$55	10 00	yes	"	1	1	.....	.....	.....	.....	.....	14
156	0	300	0	0	no	.....	.....	"	"	1	1	.....	.....	.....	.....	.....	14
429	300	75	0	"	.....	5 00	"	"	1	1	.....	.....	.....	.....	.....	12
572	\$200	572	0	.....	"	.....	5 00	"	"	1	.....	.....	.....	.....	.....	.....	21
572	372	200	50	"	.....	5 50	"	"	.....	.....	.....	.....	.....	.....	.....	9
728	500	0	0	500	200	.....	"	"	1	1	.....	.....	.....	.....	.....	15
286	0	0	no	.....	.....	no	"	1	.....	.....	3 00	.....	.....	.....	17
624	624	0	0	800	250	.....	yes	"	.....	3	1	3,000	.....	.....	.....	10
357	357	0	0	no	.....	5 00	"	"	1	.....	.....	.....	.....	.....	.....	12
286	0	.....	0	0	"	.....	.....	no	"	.....	.....	.....	3 00	.....	.....	.....	14
286	286	0	0	"	.....	6 50	yes	"	1	1	.....	.....	.....	.....	.....	16
9	0	0	"	.....	.....	no	"	.....	.....	.....	2 00	.....	.....	.....	15
312	100	0	"	.....	.....	"	"	.....	.....	.....	3 00	.....	.....	.....	10
286	0	0	"	.....	.....	"	"	.....	.....	.....	3 00	.....	.....	.....	13
13	0	0	"	.....	.....	"	"	.....	.....	.....	2 00	.....	.....	.....	16
224	0	0	"	.....	.....	"	"	.....	.....	.....	2 50	.....	.....	.....	13
917	717	200	0	"	.....	9 00	yes	"	2	1	2	5,000	.....	.....	.....	15
196	* 0	0	"	.....	.....	no	"	.....	.....	.....	.....	.....	.....	.....	15
286	* 0	0	"	.....	.....	"	"	.....	.....	.....	.....	.....	.....	.....	15
429	0	0	"	.....	.....	"	"	.....	.....	.....	4 00	.....	.....	.....	19
429	400	29	0	800	.....	.....	yes	"	.....	1	.....	.....	.....	.....	.....	16
143	0	0	no	.....	.....	no	"	1	.....	.....	2 00	.....	.....	.....	13
455	350	50	0	no	.....	6 00	"	"	1	.....	.....	.....	.....	.....	.....	17
195	300	0	0	800	400	.....	"	"	1	1	.....	.....	.....	.....	.....	16
500	300	0	0	no	.....	11 00	yes	piano	1	2	.....	.....	.....	.....	.....	13
231	0	0	no	.....	.....	no	none	1	.....	.....	3 00	.....	.....	.....	16
572	372	200	0	800	260	.....	yes	organ	1	1	.....	.....	.....	.....	.....	18
224	50	0	no	.....	.....	no	none	.....	.....	.....	3 00	.....	.....	.....	14
429	0	0	"	.....	.....	"	"	.....	.....	.....	3 00	.....	.....	.....	14
661	0	500	100	280	"	.....	.....	yes	"	1	1	.....	.....	1,250	.....	.....	12
208	0	250	0	0	400	.....	.....	no	"	.....	1	.....	.....	.....	.....	.....	19
390	300	90	0	800	150	.....	yes	"	1	1	.....	.....	.....	.....	.....	15
500	0	.....	0	0	no	.....	.....	no	"	.....	.....	.....	4 00	.....	.....	.....	14
455	0	0	"	.....	.....	"	"	.....	.....	.....	3 50	.....	.....	.....	24
104	0	0	"	.....	.....	"	"	.....	.....	.....	2 00	.....	.....	.....	14
416	400	0	0	"	.....	.....	"	"	.....	.....	.....	6 00	.....	.....	.....	18

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for	Cause for loss of time.	Wages received.
Polisher.....	23	New York	U. S.....	s				shut down	\$1 50 d
Machine hand.....	26	Mass.....	"	s				"	1 75 "
Foreman.....	30	"	"	m	3	2		"	83 33 m
Matcher.....	15	Michigan.	Germany.	s				shut down	1 50 d
Machine hand.....	21	"	U. S.....	s				"	1 50 "
Laborer.....	15	Indiana.....	"	s				"	50 "
Cabinet-maker.....	33	Canada.....	"	s				"	2 00 "
BIG RAPIDS FURNITURE CO., BIG RAPIDS.									
Foreman.....	33	Michigan.	Germany.	m	3	1		"	2 50 "
Laborer.....	35	New York	"	m	1	1		"	1 00 "
Machine hand.....	32	Wisconsin	U. S.....	m	2	2		shut down	1 50 "
Finisher.....	18	New York	"	s				"	65 "
Machine hand.....	23	Germany.	Germany.	m	0	0		"	1 50 "
"	40	Ohio.....	U. S.....	m	0	4		"	1 50 "
Finisher.....	18	Michigan.	"	s				"	1 50 "
"	22	"	"	s				"	1 50 "
"	14	Germany.	Germany.	s				first work	50 "
Machine hand.....	16	Canada.....	Canada.	s				"	50 "
"	45	Holland.....	Holland.	m	6			shut down	2 25 "
"	61	Germany.	Germany.	m	8			"	1 25 "
GRAND LEDGE CHAIR CO., GRAND LEDGE.									
Sand-paperer.....	18	Michigan.	U. S.....	s				sickness	4 00 w
Machine hand.....	17	"	"	s				"	5 25 "
Shellacer.....	19	"	Ireland	s				vacation	5 00 "
"	18	"	U. S.....	s				"	5 00 "
Sand-paperer.....	19	Ohio.....	"	s				sickness	5 00 "
Turner.....	16	Michigan.	"	s				"	4 00 "
Rubber.....	15	"	"	s				"	4 00 "
Varnisher.....	16	"	"	s				sickness	5 00 "
Caner.....	18	"	"	s				"	2 00 "
Sand-paperer.....	19	"	"	s				"	4 00 "
Packer & sand-paper	18	Ohio.....	"	s				sickness	3 00 "
Sand-paperer.....	18	Michigan.	"	s				vacation	4 00 "
"	13	"	"	s				"	2 50 "
Chair hand.....	19	Illinois.....	"	s				"	75 d
Sawyer.....	31	Michigan.	"	m	0			"	1 25 "
Sand-paperer.....	23	"	Germany.	m	0			"	1 25 "
Sawyer.....	18	"	U. S.....	s				sickness	4 50 w
Screw hand.....	19	"	"	s				"	75 d
Rubber.....	17	"	"	s				"	4 50 w
Chair hand.....	22	"	"	s				"	1 50 d
Rubber.....	25	New York	"	m	4			"	4 50 w
Book-keeper.....	18	Michigan.	"	s				"	6 00 "
Machine hand.....	20	"	"	s				"	1 00 d
Stock dresser.....	35	"	"	m	0			"	1 50 "
Packer.....	16	"	Ireland.	s				at school	4 50 w
Stock dresser.....	38	"	U. S.....	m	1			"	1 50 d
Sand-paperer.....	20	"	"	s				sickness	1 00 "
Saw duster.....	19	"	"	s				"	4 50 w
Sawyer.....	38	New York	"	m	4			sickness	1 25 d
Caner.....	14	Michigan.	"	s				"	2 50 w
Chair hand.....	21	"	"	s				sickness	1 00 d
Packer.....	15	"	"	s				"	5 00 w
Sand-paperer.....	16	"	"	s				"	3 50 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
380			0	0	no			no	none				3 5				14
455			0	0	"			"	"				3 5				15
1,000	\$500		\$200	0	"		\$10 00	yes	organ	1	2	1		\$1,000			15
82			*	0	"			no	none								14
429			* 0	0	"			"	"				3 5				17
130			* 0	0	"			"	"								14
416			800	0	"			"	"				5 0				20
650		500	0	0	\$1,000	\$400		yes	organ	1	2						15
312		300	0	0	no		5 00	"	none		1	1					15
380		350	0	0	800	200		"	"		1	1					15
152			0	0	no			no	"								13
312		300	0	0	"		5 00	"	"								15
380		500	0	0	"		4 00	yes	"		1						16
429			100	\$50	"			no	"		1	1	3 5				15
463			50	0	"			"	"				3 5				14
39			0	0	"			"	"				2 0				13
39			0	0	"			"	"				2 0				15
585	0	500	0	0	700			yes	"		1	1	2 0				18
325	0	325	0	0	300			yes	"		1	1					14
204			0	0	no			no	"			1	2 0				14
273			0	0	"			"	"			1					15
254			0	0	"			"	"				1				17
254			0	0	"			"	"				2				15
238			0	0	"			"	"			1					15
206			0	0	"			"	"								14
206			0	0	"			"	"		1						14
254			0	0	"			"	"			1					14
104			0	0	"			"	"								11
206			0	0	"			"	"								12
153			0	0	"			"	"			1	2				14
199			0	0	"			"	"				1	2 0			14
120			0	0	"			"	"								12
224			0	0	"			"	"			1		2 5			16
224			0	0	"			yes	"		1						16
380		340	50	0	800			yes	"		1						16
380		315	75	0	no		4 00	"	"		1						15
224			0	0	"			no	"				3 5				15
224			0	0	"			"	"				1 5				14
214			25	0	"			"	"				1 5				10
458			0	0	"			"	"				3 5				16
229		229	0	0	"		5 00	yes	violin								12
305			0	0	"			no	none				2 5				14
315			0	0	"			"	"			1	3 0				14
448		298	50	0	1,000			yes	"		1	2					16
195			0	0	no			no	"				1 5				13
468		358	100	0	"		4 00	yes	"		1	1		1,000			18
305		305	0	0	"		4 50	"	"			1	2				15
234			0	0	"			no	banjo		1	1	2 0				15
374		374	0	0	"		4 00	yes	none			1					15
130			0	0	"			no	"								12
299			0	0	"			"	"								16
244			50	30	"			"	violin				2 50				18
182			0	0	"			"	none				2 0				13

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Joiner	28	Michigan	Ireland	s	—	—	0	8	1	8	284	sickness	\$1 80 d
Rubber	17	"	U. S.	s	—	—	0	2	2	11½	7	"	4 00 w
Filler	16	"	"	s	—	—	0	8w	3w	12	—	"	4 50 w
Varnisher	30	"	"	s	—	—	0	1	1	11½	18	vacation	3 00 "
Lumberman	30	"	Germany	m	0	0	1	3	2m	11½	6	no work	1 12½ d
Rubber	33	"	U. S.	s	2	1	1	15	11½	11½	6	sickness	2 80 "
Drayman	23	"	"	s	—	—	0	2w	2d	12	—	"	4 50 w
Machine hand	35	New York	"	m	4	3	5	1	1	12	—	"	1 00 w
"	29	Michigan	"	m	0	0	1	1	1	12	—	"	1 25 "
"	35	"	"	m	1	0	2	4	4	11½	6	sickness	1 50 "
Marker	16	"	"	m	0	0	1	3	3	12	—	"	1 37 "
Sand-paperer	17	"	"	s	—	—	0	1	1	11½	6	sickness	4 50 w
Turner	20	"	"	s	—	—	0	2	2	11½	13	sickness	1 00 d
Foreman	38	"	Ireland	m	1	1	2	23	6	12	—	"	2 00 "
"	48	"	U. S.	m	1	0	2	20	6	12	—	"	2 00 "
"	35	"	"	m	1	0	2	10	6	12	—	"	2 00 "
Shellacer	19	"	"	s	—	—	2	2	2	11½	7	personal work	1 00 "
Drayman	38	"	"	m	2	1	2	3	1	12	—	"	1 25 "
Turner	17	"	"	s	—	—	0	1	1	11½	7	sickness	5 00 w
Machine hand	27	"	"	m	1	0	2	1	2	11½	7	"	1 25 w
Sand-paperer	50	Canada	France	m	3	3	2	20	3	11	26	dissipation	2 25 d
"	29	Michigan	U. S.	s	—	—	1	3	3	12	—	"	7 00 w
Laborer	25	"	"	m	0	0	1	1	1	12	—	"	1 00 d
Sand-paperer	20	"	"	s	—	—	0	1	1	12	—	"	1 00 "
Gluer	39	"	"	m	1	0	1	2	2	11½	7	sickness	1 25 "
Machine hand	28	"	"	s	—	—	0	4	1	12	—	"	1 50 "
"	19	"	"	s	—	—	0	1	1	12	—	"	5 25 w
Finisher	42	New York	Ireland	m	3	2	4	30	5	11½	19	not answered	2 50 d
WELCH FOLDING BED CO., SPARTA.													
Varnisher	20	U. S.	U. S.	s	—	—	0	6	½	11½	19	no work	3 00 w
Wire weaver	19	"	"	s	—	—	1	1	1	11	25	vacation	1 00 d
Cabinet-maker	30	Sweden	Sweden	s	—	—	0	9	1m	12	—	"	1 75 "
Polisher	20	"	"	s	—	—	0	2½	2	11½	13	no work	10 00 w
Cabinet-maker	20	U. S.	U. S.	s	—	—	0	2½	1½	11½	19	"	10 00 "
"	20	"	"	s	—	—	0	5w	5w	12	—	"	5 00 "
"	31	Canada	Canada	s	—	—	0	2	2	11½	13	no work	1 75 d
"	38	Sweden	Sweden	m	5	1	6	15	2	11½	19	"	15 00 w
"	34	"	"	m	2	0	3	11	1½	11½	19	"	11 00 "
Carver	25	France	France	m	1	0	2	8	1½	11½	19	"	3 30 d
"	23	U. S.	U. S.	s	—	—	0	3	1½	11½	19	"	1 25 "
Cabinet-maker	27	Sweden	Sweden	s	—	—	0	1	1	11½	19	"	1 25 "
Stainer	46	"	"	m	6	3	7	2	2	11½	19	"	1 50 "
Cabinet-maker	19	U. S.	U. S.	s	—	—	0	2m	2m	9	73	"	4 00 w
"	25	"	"	m	1	0	2	½	½	10½	38	"	1 00 d
"	40	Sweden	Sweden	m	1	0	2	2	1	11½	19	"	10 00 w
Round-worker	13	U. S.	U. S.	s	—	—	0	7m	7m	7	—	first work	2 00 w
Cabinet-maker	28	Denmark	Denmark	m	0	0	1	12	3	11½	19	no work	14 00 "
Sand-paperer	18	U. S.	U. S.	s	—	—	0	4m	1½	11½	19	"	4 00 "
Painter	40	"	"	m	2	0	3	26	3	11½	19	"	8 00 "
Sand-paperer	13	"	"	s	—	—	0	½	½	6	—	first work	8 00 "
Filler	37	"	"	m	3	0	4	½	½	11½	19	no work	1 12 d
"	27	"	"	s	—	—	1	½	½	11½	13	"	8 00 w

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family,	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$117			0	0	no			no	none	1	1		\$4 00				9
204			0	0	"			"	"	1	1		1 50				14
224			0	0	"			"	"	2	2		2 50				14
149			0	0	"			"	"								15
355			0	0	"			"	"	1	1		3 50				15
344	\$248		0	0	"		\$5 00	yes	organ	1	1						18
701	701		0	0	"			no	none	1	1						16
224		\$15	0	\$15	"			"	banjo	1	2		2 00				14
312			0	0	"			"	none	1	1		3 00				15
390	390		0	0	"		5 00	yes	organ	2	1						14
390	390		0	0	"		4 00	"	none	1	2						16
458	358		100	0	\$1,000			"	"	1							17
429	300		75	0	800			"	"	1	1						14
229			0	0	no			no	"				2 00				15
208			0	0	"			"	"	1			2 00				13
299			0	0	"			"	"				3 00				13
524	524		100	0	1,000			yes	"	1	2	2					15
524	524		0	0	1,200			"	"	1	2						16
524	424		200	0	2,000			"	"	1	2	1					14
305	305		0	0	no		3 50	no	"	1	1						16
390	385	25	0	0	800			yes	"	1	1						19
254		10	10	10	no			no	"				1 50				15
382	382		0	0	700			"	organ	1		2		\$1,000			17
543	543		0	0	1,000			yes	none	1	1						14
354	354		0	0	no		4 50	"	none	1		2					18
312	312		0	0	"		4 00	no	"		1						14
312			50	0	"			"	"	1		1	2 00				14
382	382		0	0	"		6 00	yes	organ	1		1					16
468			0	0	"			no	none	1			4 00				17
273			0	0	"			"	"		1		2 50				15
791	781		0	0	"		7 00	yes	"	1							12
390			0	0	"			no	"		1		3 50				14
234	236		0	80	"		3 00	yes	"		1						10
546	\$10		150	1,000	"			no	"				3 50				14
498		75	75	75	"			"	"		1		3 50				14
487			0	0	"			"	guitar	1			3 50				17
280		50	50	50	"			"	none				2 00				12
528		150	175	175	"			"	"	1	1		3 25				16
731	600	50	50	50	"		5 50	yes	"	1							14
598	400	450	0	0	"		5 50	"	"	1	1						10
955	650	815	400	400	"		6 00	"	organ	1		2			1	\$5 00	17
356		30	30	30	"			no	horn	1			3 50				13
386		* 50	50	50	"			"	none				3 00				14
599	400	50	0	0	800	\$200		yes	"		1						14
156		0	0	0	no			no	"				1 00				12
273	200	0	0	0	"		3 25	"	"		1						14
487	487	0	0	0	"			"	"								14
51		*	0	0	"			"	"								12
592	0	550	100	200	"		5 00	yes	"		1			1,000			16
195		0	0	0	"			no	"				2 00				16
390	350		0	0	"		5 00	"	"		2						13
78		10	10	10	"			"	"								12
328	250	25	25	500	400			yes	"		1						13
399	324	75	1,300	no				no	"								14

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for living the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Cabinet-maker.	57	U. S.	U. S.	m	1	1		18	no work	\$9 00 d
Trimmer.	57	Canada	Canada	m	1	1		18	"	8 00 "
Cabinet-maker.	58	U. S.	U. S.	s				18	"	11 00 w
Carver.	50	"	U. S.	s				18	"	2 75 d
Stamper.	12	"	"	s				18	"	2 00 w
Lumber piler.	35	"	"	m	0	0				1 12 d
Foreman.	39	Canada	England	m	1	1		19	no work	2 50 "
Varnisher.	37	Holland	Holland	m	0	0		19	"	2 75 "
"	31	Ireland	Ireland	m	0	0		19	"	1 75 "
"	21	U. S.	U. S.	s				19	"	10 00 w
"	35	Sweden	Sweden	s				19	"	10 00 "
Finisher.	27	U. S.	Ireland	s				19	"	10 00 "
Laborer.	18	"	U. S.	s				19	first work	2 50 "
Machine hand.	26	"	"	s			0 8m 2 11 11 19	19	no work	11 00 "
"	17	"	"	s			0 8m 8m 8 19	19	first work	4 50 "
Laborer.	14	"	"	s			0 2w 1 11 19	19	no work	8 00 "
Machine hand.	34	England	England	m	1	1	2 18 2 11 19	19	"	2 25 d
Polisher.	31	U. S.	U. S.	m	1	0	2 2 2 11 19	19	"	10 00 w
Machine hand.	16	"	"	s			0 2 2 11 19	19	"	1 00 d
Tool repairer.	39	"	"	m	1	0	2 6 2 11 19	19	"	2 00 "
Machine hand.	36	"	"	m	4	3	5 20 3 11 19	19	"	1 75 "
"	35	"	"	s			2 3 2 12 19	19	"	10 00 w
Carpenter & joiner.	15	"	"	m	1	0	2 25 3 11 19	19	no work	1 25 d
Lumber piler.	18	"	"	m	7	4	8 7m 7m 12 19	19	"	1 25 "
Packer.	38	"	"	m	1	0	2 2 2 11 19	19	no work	10 00 w
Machine hand.	36	"	"	m	1	0	2 3 2 11 19	19	"	11 00 "
Rubber.	19	"	"	s			0 6 4 11 19	19	"	10 00 "
Machine hand.	32	"	"	m	0	0	1 2 2 11 19	19	"	10 00 "
Sand-paperer.	15	"	"	s			0 8w 8w 11 19	19	"	2 50 "
Turner.	43	Denmark	Denmark	m	3	2	4 26 2 11 19	19	"	1 75 d
Fireman.	52	U. S.	U. S.	m	1	0	2 3w 3w 12 19	19	"	1 25 "
Duster.	24	"	"	m	0	0	1 2 2 11 19	19	no work	1 00 "
Rubber.	39	Sweden	Sweden	s			0 6 2 11 19	19	"	1 50 "
Engineer.	39	U. S.	U. S.	m	0	0	1 16 1 11 19	19	"	14 00 w
Machine hand.	33	Canada	Canada	m	1	0	2 2 2 12 19	19	"	10 00 "
Lumber piler.	32	U. S.	U. S.	m	1	0	2 1 1 11 19	19	no work	1 25 d
Rubber.	21	Sweden	Sweden	s			0 1 1 11 19	19	"	1 50 "
Fireman.	32	U. S.	U. S.	s			0 6 10w 12 19	19	first work	1 50 "
Machine hand.	18	"	"	m	2	1	3 4 10m 11 19	19	no work	2 50 w
"	18	"	"	m	2	1	3 4 10m 11 19	19	no work	1 50 d
RING-BRADY CO., SAGINAW.										
Cabinet-maker.	28	Michigan	Germany	m	2		3 2 2 9 78	78	shot down	1 75 "
"	26	Canada	"	m	0	0	1 6 4m 9 78	78	"	10 00 w
Machinist.	25	Indiana	U. S.	s			0 12 2 9 78	78	"	2 00 d
Sander.	17	Germany	Germany	s			0 2 2 9 78	78	no work	1 00 "
Cabinet-maker.	19	Michigan	U. S.	s			2 5m 5m 11 78	78	shot down	1 00 "
"	19	"	"	s			0 4 2 9 78	78	"	8 00 w
Machine hand.	17	"	Germany	s			0 2 1 9 78	78	"	8 00 "
Cabinet-maker.	29	Poland	Poland	m	1		2 3 2 8 104	104	no work	10 00 "
Sawyer.	27	Indiana	U. S.	m	0	0	1 2 2 9 78	78	shot down	1 50 d
Machine hand.	27	Michigan	Switz.	m	0	0	1 10 2 10 62	62	"	2 25 "
Cabinet-maker.	28	Canada	Canada	m	2		3 11 2 9 78	78	"	11 00 w
Sawyer.	21	Ohio	U. S.	s			0 8 2 9 78	78	"	3 00 d
Trimmer.	22	Michigan	"	s			0 16 2 9 78	78	"	2 00 "

TABLE NO. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$598		\$400	\$198	\$100	\$2,500	\$100		yes	none	1					13
598		300	150	2,000	900			no	organ	2		\$2,000			13
548			0	0	no			no	guitar	1		1,000			16
804			50	0	no			no	none		\$3 00				14
99			*	0							* 25		1	\$5 00	11
351		250	0	409			\$1 00	yes	"	1					14
780		175	800	200	1,600		8 00	"	"	1		2,000			18
804		804	0	0				"	"	1		1,000			20
512		372	140	175	no			no	organ	1	8 50				15
487			100	100				"	none	1	8 50				18
487			100	100				"	"		8 50				15
487			25	25				"	"	1	8 50				12
82			20	20				"	"						13
536			0	0				"	"	1	8 25				15
156			0	0				"	"	1	+				16
146		*	0	0				"	"		*				18
1,333		800	200	900				yes	organ	1					15
487		450	0	0				no	none	1					16
292		109	100	100				yes	none	1					14
583		250	300	0	1,800			yes	piano	1					16
512		350	50	50	no		4 00	"	none						12
520			0	25				no	"		4 00				15
365		330	0	0	700			yes	"						13
740		230	100	0	500	35		"	"	1					13
487		250	150	0	275	35		"	"	1					14
536		450	0	0	1,300			"	organ						12
487			0	0	no			no	none		8 50				13
487		360	50	50			5 50	"	"	1		1,250			15
122		*	0	0				"	"		*				13
512	\$10	450	0	0			8 50	yes	"	1					14
390		150	50	50				"	"						14
286		250	0	0	800			"	organ	1					13
429	0	25	25	25	no			no	none	1	8 50				15
682		250	200	225	700			yes	organ	1					14
520		300	150	1,200	no		8 00	"	none			1,000			12
368		300	25	25			5 00	"	"						13
439	0		25	25				no	"		8 50				11
468			0	200				"	"	1	3 00	2,000			10
65			8	3				"	"		2 00				13
439		300	75	0			6 00	yes	organ	1		1,000			12
409		409	0	0	700	100		no	"	1		2,000	1	6 00	9
390	0	390	0	0	no		6 00	"	none		8 50				11
468			0	0				"	"		*				12
234			*	0				"	"						13
296		296	0	0				yes	"						17
312			0	0				no	"		8 50				18
312		*	0	0				"	"	1	*				15
347	0	347	0	0			6 00	"	"	2		800	1	3 00	17
351		200	100	0	600	50		"	"	1		1,000	1	8 00	12
585		585	0	0	no		8 00	"	"						11
429	25	300	129	500			6 00	"	"	1					16
468			0	0				"	"		8 50				10
465			200	0				"	"		4 00	2,000	1	10 00	11

* Gives wages to parents and lives at home.

† Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received
Machine-hand	20	New York	U. S.	s					1	9	78	shut down	\$8 00 w
Laborer	30	Canada	Canada	m	1				1	9	104	"	1 25 d
Sawyer	33	Michigan	England	w	2				8	10	53	"	2 00 "
Packer	27	Switz.	Switz.	s					2m	8	104	no work	1 25 "
Drawers driver	18	Michigan	Germany	s				m	8m	12			1 00 "
Sawyer	20	"	U. S.	s					1	9	78	shut down	1 50 "
Laborer	15	"	"	s					1	9		first work	3 00 w
Superintendent	27	Ohio	"	m	0	0			2	13			33 33 m
Packer	24	Maine	"	s					1m	11	38	vacation	10 00 w
Sander	16	Germany	Germany	s					1	9	78	shut down	3 33 "
Shipper	18	Michigan	Canada	s					1	9	78	no work	1 25 d
Cabinet-maker	17	Germany	Germany	s				w	1w	6	156	"	4 00 w
"	26	Canada	Canada	m	1	0			3	9	78	shut down	1 75 d
Sander	15	Michigan	Germany	s					1	9	78	no work	4 50 w
Machine hand	20	New York	U. S.	s					1	9	78	"	2 00 d
Filler	15	England	England	s					1	10	52	shut down	3 60 w
Sander	17	Michigan	Germany	s					1	9	78	no work	3 00 "
Finisher foreman	30	"	Ireland	s					2	10	52	shut down	3 50 d
Cabinet foreman	37	Vermont	U. S.	m	0	0			2	9	78	"	18 00 w
Finisher	23	Michigan	"	s					2	12			12 00 "
Sawyer	31	"	"	s					2w	10	52	shut down	3 00 d
Laborer	22	"	Canada	m	1	0			1	9	78	"	1 25 "
Sander	16	Germany	Germany	s					1	9	78	"	3 00 w
Picker	16	"	"	s					1	9	78	no work	50 d
Finisher	20	Michigan	"	s					2m	9	78	fire	3 00 w
"	20	"	Prussia	s					1	10	52	no work	3 00 "
"	24	Germany	Germany	s					2	10	52	shut down	1 50 d
Machine hand	23	Canada	U. S.	m	1	0			1	9	78	shop closed	1 25 "
Finisher	23	New York	Germany	s					5m	9	78	shut down	1 75 "
Machine hand	16	Michigan	U. S.	s					1	9	78	no work	75 "
Stainer	15	"	Denmark	s					7m	10	52	"	75 "
Filler	14	"	Germany	s					1	11	26	"	3 00 w
Cabinet-maker	19	"	Canada	s					2	9	78	shut down	1 22 d
Finisher	23	Germany	Germany	s					1	9	78	no work	9 50 w
SPENCER & BARNES, BUCHANAN.													
Varnisher	34	Michigan	U. S.	m	0	0			4	10	52	sickness	10 50 "
Machine hand	24	"	"	m	0	0			9	10	52	no work	3 40 "
Cabinet-maker	23	Ohio	"	s					2	11	26	"	9 00 w
Carver	23	"	"	s					5m	11	26	shut down	12 00 "
Machine hand	27	Michigan	"	m	2	0			2	11	26	sickness	1 40 d
Packer	46	New York	"	m	2	2			3	11	26	no work	9 00 w
Rubber	22	Michigan	England	m	1	0			1	12			1 25 d
Machine hand	27	Virginia	U. S.	m	1	1			4m	7	120	no work	9 00 w
Sander	43	Michigan	"	m	2	1			1	8	104	shut down	9 00 "
Machine hand	27	Ohio	"	m	2	2			2	11	26	"	7 50 "
"	27	Kentucky	France	m	2	1			3	10	52	sickness	10 20 "
"	30	Michigan	U. S.	m	0	0			5m	6	156	shut down	10 50 "
Varnisher	24	"	"	s					5	11	26	no work	1 75 d
Cabinet-maker	24	Indiana	"	s					4	9	78	"	9 75 w
Machine hand	44	Ohio	"	m	2	2		3 15	4	11	26	shut down	9 00 "
"	20	Michigan	"	s				0 5	2	8	104	"	7 50 "
Cabinet-maker	43	"	"	m	3	3		4 8	2	11	26	sickness	9 00 "
Machine hand	40	Indiana	"	m	0	0		1 7	7	11	26	shut down	1 30 d
Cabinet-maker	32	Penn	"	m	3	2		4 2	3	11	18	"	9 00 w

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Annual earnings of yourself and family.	Amount of money on arrival in U. R.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$312			*	0	no			no	none				*				15
260	0	\$290	* 0	0	no	\$700											12
530		287	\$25	\$75	no								\$4 00	\$1,000	1	\$15 00	14
260	\$30		* 0	0	"			"	"			1	3 50				16
312				0	"			"	"								17
351			* 0	0	"			"	"				3 00				10
78				0	"			"	"								14
1,000	1,000		0	1,100	"		\$10 00	yes	organ	1	1		3 50	\$4,000	1	15 00	14
477			* 0	10	"			no	none				*				17
129				0	"			"	"								15
292			* 0	750	"			"	"	2	1	1	2 50		1	3 00	15
104				0	"			"	"								14
409		409	* 0	0	"		6 00	yes	"				*				16
156				0	"			no	"								14
468		418	50	0	"		6 00	yes	st. & gu.	1							15
156			*	0	"			no	none				*				14
117			*	25	"			"	"			1	*				12
650			100	0	"			"	"			1	4 50				12
702		702	0	0	"		10 00	yes	"	1	1			5,000			18
624			0	0	"			no	"			1	4 00				11
530			180	0	"			"	"				3 50				12
292		242	50	0	"		3 00	yes	"				*				12
117			* 50	0	"			no	"				*				14
140			*	0	"			"	"				2 50				15
312			0	0	"			"	"								15
347				150	"			"	"				3 00				15
380			0	100	"			"	"				3 50				17
292	50	292	0	0	"		4 00	"	"		2						12
409			* 0	0	"			"	"				3 50				17
176				0	"			"	"				*				15
196			*	0	"			"	"				*				13
143			*	0	"			"	"				*				18
292			*	0	"			"	horn				*				14
370			0	0	"			"	none				3 50				14
455		400	0	0	"		6 00	"	"			1					15
364		350	0	0	"		5 00	"	"			1					15
439			75	0	"			"	"			2	2 50				16
572			0	0	"			"	"			1	3 00				18
400		400	0	0	"		5 00	"	"	2		3					12
479		250	150	0	650	150		yes	organ		1	1					14
390		300	0	0	no	500	4 00	"	none								16
373		203	70	0	no	180		"	"			1					13
312		312	0	0	no		5 00	no	"			2					18
357		377	0	0	no		5 00	yes	"			1					12
442		182	180	0	"		5 00	"	"			2					12
273		280	0	0	500			"	"	1							15
500			100	0	no			no	"				3 00				17
380			50	0	200			"	organ	1	2	2	2 50				15
429		429	0	0	400			yes	"	1	2						16
290			0	0	no			no	none	1	1		3 50				15
637		280	0	0	"		6 00	yes	melod'n		1						15
373		200	100	0	500			"	"		2						15
448		448	0	0	no		5 00	"	none								10

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Carver.....	28	New York.....	U. S.....	m.....	2.....	0.....	3.....	8.....	18.....	25.....	no work.....	\$11 10 w.....	
Cabinet-maker..	48	Indiana.....	".....	m.....	1.....	0.....	4.....	25.....	11.....	78.....	".....	10 50 "	
Machine hand..	28	".....	".....	m.....	1.....	0.....	3.....	7.....	9.....	78.....	".....	12 00 "	
Night-watch....	46	".....	".....	m.....	2.....	0.....	3.....	6.....	7.....	11 1/2.....	vacation.....	7 50 "	
Finisher.....	41	Michigan.....	".....	s.....	.....	.....	0.....	8.....	1m.....	9.....	no work.....	7 50 "
Engineer.....	40	".....	".....	m.....	0.....	0.....	1.....	25.....	18.....	.....	.....	12 00 "
Packer.....	38	Indiana.....	".....	m.....	3.....	1.....	8.....	3.....	11.....	25.....	sickness.....	7 50 "	
Finisher.....	28	Michigan.....	".....	s.....	.....	.....	0.....	8.....	12.....	.....	.....	6 80 "
".....	22	".....	".....	s.....	.....	.....	0.....	8.....	2.....	10.....	no work.....	8 40 "
Laborer.....	56	Penn.....	".....	s.....	0.....	1 1/2.....	8.....	224.....	".....	9 00 "
Finisher.....	31	New York.....	".....	m.....	2.....	0.....	4.....	1 1/2.....	10.....	52.....	".....	6 90 "	
Shipping clerk..	37	".....	".....	m.....	1.....	0.....	.....	2 1/2.....	12.....	.....	.....	48 50 m.....
Machine hand..	31	Michigan.....	".....	m.....	0.....	0.....	.....	6.....	11.....	25.....	shut down.....	10 80 w.....
Filler.....	24	".....	".....	s.....	.....	.....	.....	7m.....	10.....	52.....	no work.....	7 50 "
Cabinet-maker..	38	France.....	France.....	m.....	4.....	.....	.....	8.....	11.....	25.....	sickness.....	12 00 "
Finisher.....	28	Michigan.....	U. S.....	s.....	.....	.....	.....	1 1/2.....	9.....	78.....	no work.....	8 00 "
Machine hand..	20	".....	".....	s.....	.....	.....	.....	1 1/2.....	8.....	78.....	vacation.....	6 00 "
Varnisher.....	26	Indiana.....	".....	m.....	2.....	.....	.....	1m.....	8.....	104.....	no work.....	6 00 "
Cabinet-maker..	52	Germany.....	Germany.....	m.....	1.....	.....	.....	5.....	9.....	78.....	".....	9 00 "
Foreman.....	37	Illinois.....	U. S.....	m.....	2.....	.....	.....	6.....	12.....	.....	.....	13 50 "
Machine hand..	41	Indiana.....	".....	m.....	8.....	.....	.....	6.....	10.....	52.....	shut down.....	11 40 "
".....	28	Ohio.....	".....	m.....	4.....	.....	.....	8.....	11.....	25.....	".....	1 25 d.....
Varnisher.....	20	Michigan.....	".....	s.....	.....	.....	.....	1w.....	9.....	78.....	voluntary.....	8 10 w.....
Machine hand..	24	".....	".....	s.....	.....	.....	.....	1.....	10.....	52.....	no work.....	1 25 d.....
Stainer.....	58	".....	".....	m.....	4.....	.....	.....	2.....	10.....	52.....	".....	1 14 "
Machine hand..	22	Indiana.....	Germany.....	s.....	.....	.....	.....	7.....	8.....	104.....	shut down.....	9 00 w.....
Laborer.....	51	Ohio.....	U. S.....	m.....	1.....	.....	.....	1.....	4.....	206.....	no work.....	9 00 "
OSBORN FURNITURE COMPANY, BUCHANAN.													
Engineer.....	38	Michigan.....	U. S.....	m.....	1.....	.....	.....	2w.....	8.....	104.....	shop closed.....	7 50 "
Machine hand..	28	Canada.....	Scotland.....	m.....	3.....	.....	.....	1 1/2.....	8.....	104.....	".....	9 00 w.....
Varnisher.....	19	Michigan.....	U. S.....	s.....	.....	.....	.....	4m.....	9.....	78.....	no work.....	1 25 d.....
Cabinet-maker..	36	Germany.....	Germany.....	m.....	0.....	.....	.....	8m.....	9.....	78.....	".....	1 50 "
Polisher.....	41	Delaware.....	U. S.....	m.....	2.....	.....	.....	1w.....	9.....	78.....	".....	7 50 w.....
Packer.....	17	Michigan.....	".....	s.....	.....	.....	.....	1 1/2.....	6.....	156.....	".....	65 d.....
Turner.....	34	".....	".....	m.....	3.....	.....	.....	1.....	9.....	78.....	".....	1 75 "
Foreman.....	35	New York.....	".....	m.....	2.....	.....	.....	1.....	7.....	130.....	".....	19 00 w.....
".....	42	Indiana.....	".....	m.....	1.....	.....	.....	1.....	11.....	25.....	".....	9 25 d.....
EMPIRE FURNITURE COMPANY, CONSTANTINE.													
Machine hand..	27	Iowa.....	U. S.....	s.....	1.....	12.....	sickness.....	6 00 w.....
".....	26	Penn.....	".....	s.....	1w.....	11 1/2.....	voluntary.....	7 50 "
Foreman.....	33	New York.....	".....	m.....	1.....	1 1/2.....	11 1/2.....	6.....	16 00 "
Shipping clerk..	48	".....	".....	m.....	1.....	1 1/2.....	12.....	68 68 m.....
Machine hand..	26	".....	".....	m.....	0.....	1.....	12.....	10 00 w.....
Bench-worker..	27	Indiana.....	".....	m.....	1.....	1.....	12.....	8 00 "
Packer.....	29	Ohio.....	Germany.....	m.....	3.....	1.....	12.....	7 50 "
Machine hand..	34	Michigan.....	U. S.....	m.....	1.....	1.....	12.....	10 00 "
".....	15	".....	".....	s.....	1.....	12.....	4 00 "
Bench-worker..	27	Indiana.....	".....	m.....	1.....	1.....	12.....	8 00 "
Finisher.....	19	Vermont.....	".....	s.....	.....	.....	.....	1.....	11 1/2.....	6.....	voluntary.....	7 50 "
Cabinet-maker..	22	Michigan.....	".....	m.....	1.....	1 1/2.....	12.....	8 00 "
Errand boy.....	18	".....	".....	s.....	1 1/2.....	5.....	3 00 "
Cabinet-maker..	19	Indiana.....	".....	s.....	1.....	11 1/2.....	6.....	6 50 "
".....	47	Canada.....	Scotland.....	m.....	3.....	1.....	12.....	10 50 "
Machine hand..	25	Michigan.....	U. S.....	s.....	0.....	12.....	10 50 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, in cluding room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sick-ness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
3677		\$260	\$125	0	no		\$5 00	yes	cornet	1							14
500		384	0	0	no		5 50	no	none		1	1					15
468		400	0	0	"		5 00	no	violin		1						14
382		382	0	0	"		6 00	yes	none								10
393			50	0	"			no	"	2	2	1	\$1 50	\$1,000			10
624		324	300	0	\$2,000	\$200	5 50	yes	"	1	3	1					13
367		300	30	\$100	400			no	"		1	3					13
359			0	0	no			no	"		1	3					18
364			50	0	"			"	"		1	1	3 00				13
117		210	30	0	500			"	"			1					10
299		250	0	0	no		4 00	yes	violin			1					19
532		250	150	0	"		4 00	no	organ			1		2,000			15
515		450	50	0	"		5 00	"	none	1							16
385			0	0	"			"	"		2		2 50				10
572		350	0	0	"		6 00	yes	"								17
312			0	0	"			no	"				3 50				15
228			0	0	"			"	cornet			1	2 50				15
277		250	0	0	1,000			"	organ		2						14
351	\$40	300	50	0	700	200		yes	none	1	1						17
702		600	100	0	no		5 00	"	"		8						17
494		400	50	0	"		5 00	"	"	1							13
367		350	0	0	"		3 50	no	"								12
316			9	0	"			no	"				2 00				13
325			30	0	"			no	tromb.				3 50				15
299		299	0	0	"		4 00	yes	none								8
312			0	0	"			no	"	1			3 20				14
156		150	0	0	700			yes	organ		2	1					12
280		250	0	0	no		5 00	"	none		1	1					16
312		288	0	0	350	200		"	"		3						13
262			0	0	no			no	"		1		1 50				14
356		300	0	0	"		4 00	no	"		1						15
262		222	0	0	"		4 25	yes	"		2						12
101			0	0	"			no	"								16
409		409	0	0	"		6 00	yes	"		1						17
364		600	9	0	"		6 00	no	violin	1	1	2					12
643		450	150	0	1,400			"	none		1	1			1	\$3 00	14
312			*	0	no			"	organ	1	2		*				12
382			100	0	"			no	none				2 50				15
764		500	250	250	no		7 00	yes	organ	1				1,000			16
800		500	300	1,600	"		8 00	no	organ	1	1	1		1,000			12
520		400	120	0	"		5 00	no	"	1							12
416		416	0	0	"		6 00	yes	"		1						16
390		390	0	0	"		5 00	no	"	1							15
520		370	150	0	800			no	"		1						14
308			0	0	no			no	"				1 50				14
416		416	0	0	"		6 00	yes	"								16
382			0	0	"			no	"				3 00				16
468		400	60	60	"		8 00	no	piano	1	1	1					20
78			0	0	"			no	none				1 00				13
381			30	0	"			no	"				1 50				18
546	145	546	0	0	1,000			"	"								15
546			100	0	no			"	"				3 25				15

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Kiln tender.....	44	Penn.	U. S.	m		7	20	1 1/2	12			\$10 00 w
Finisher.....	30	Michigan	France	w'r		1	12	1 1/2	12			11 00 "
Cabinet-maker.....	50	Germany	Germany	m		1	30	1	12			12 00 "
Bench worker.....	34	Penn.	U. S.	m		2	1	1	12			8 00 "
Cabinet-maker.....	29	Switz.	Switz.	m		3	15	1 1/2	12			12 50 "
Yard hand.....	17	Michigan	England	s		0	1/2	1/2	12			5 50 "
Teamster.....	40	"	"	m		0	12	1 1/2	12			2 25 d
Cabinet-maker.....	56	Germany	Germany	m		1	30	1 1/2	12			10 00 w
".....	33	Switz.	Switz.	m		2	15	1	12			12 50 "
Finisher.....	23	Michigan	U. S.	s		0	3	1 1/2	11 1/2	12	sickness	7 50 "
".....	43	New York	"	w'r	1	0	20	1 1/2	12			9 00 "
Machine hand.....	19	Indiana	"	s	0	0	1 1/2	1 1/2	12			6 00 "
".....	38	"	"	m	0	0	1	14	1 1/2	12		8 50 "
Night-watch.....	39	Germany	Germany	m	1	1	2	1	12			10 00 "
Cabinet-maker.....	47	Canada	Scotland	m	8	2	4	26	1	12		10 50 "
Finisher.....	19	"	"	s								6 00 "
Miller.....	18	Iowa	U. S.	s								8 50 "
Cabinet-maker.....	30	Illinois	"	m	3	2						12 00 "
".....	21	U. S.	"	m	0	0						5 00 "
Finish'g foreman.....	44	Ohio	"	m	3	0						18 00 "
Packer.....	18	Michigan	"	s							sickness	8 00 "
Finisher.....	18	Indiana	"	s								6 00 "
Laborer.....	14	Michigan	"	s								8 00 "
Finisher.....	27	"	"	s								9 00 "
".....	21	"	"	s								6 00 "
Machine hand.....	15	"	"	s								6 00 "
".....	19	Wisconsin	Iowa	s								7 50 "
Yard hand.....	20	Michigan	U. S.	s							vacation	8 00 "
Machine hand.....	25	Indiana	"	m	0	0					sickness	8 50 "
Pattern marker.....	14	Michigan	"	s							voluntarily	4 00 "
MICHIGAN FURNITURE CO., ANN ARBOR.												
Finisher.....	15	Canada	Germany	s								9 00 m
Foreman.....	35	Germany	"	m	8	4					holidays, etc.	60 00 "
Joining & gluing.....	28	Michigan	"	w'r	0	0						1 25 d
Cabinet-maker.....	23	"	U. S.	m	0	0					holidays & sick	10 00 w
Engineer.....	24	"	Germany	s							holidays, etc.	1 20 d
Carver.....	15	"	"	s							first work	25 00 m
Laborer.....	20	"	"	s							holidays, etc.	1 20 d
Turner.....	25	Germany	"	m	0	0						1 25 "
Carver.....	31	Michigan	"	m	1	0					holidays, etc.	50 00 m
".....	17	"	"	s								20 00 "
Cabinet-maker.....	18	"	"	s							"	10 00 "
Machine hand.....	22	"	"	s								1 25 d
Cabinet-maker.....	27	Germany	"	m	1	0						10 00 w
Machine hand.....	57	"	"	m	3	0						1 00 d
".....	36	"	"	m	2	0						1 50 "
Packer & shipper.....	40	"	"	m	4	2					holidays, etc.	8 00 w
Cabinet-maker.....	20	Michigan	"	s							lock & holidays	18 00 m
".....	34	Germany	"	m	6	2						9 00 w
Finisher.....	22	"	"	s							no work	1 25 d
Book-keeper.....	26	Michigan	U. S.	s							holidays, etc.	40 00 m
Yardman.....	58	Germany	Germany	m	4	0						1 00 d
Machine hand.....	48	"	"	m	3	3					shut down	1 00 "
Cabinet app.....	18	"	"	s								20 "

TABLE NO. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$1,046		\$350	\$975	\$1,500	no		free	yes	organ	1	1	1					12
572		350	222	600	no		\$3 00	yes	"	1	1	1					14
624	0	400	200	1,200	\$900		8 00	"	'none	1	1	1					15
416		416	0	0	no		6 00	no	organ	1	1	1					14
702	\$50	415	295	175	750	400	6 00	"	none	1	1	1		\$600	1	\$4 00	14
296		0	0	0	no			no	"	1			\$2 50				15
902		500	0	0	850	\$250		yes	"	1							14
520	0	520	0	0	800	100	7 00	"	"	1	3						12
702	50	407	295	170	780	400	6 00	no	"	1	1			600	1	4 00	14
374		0	0	75	75			no	"				8 00				18
468		0	0	0	no			"	"	1			4 00				16
312		0	0	0	"			"	"				8 00				14
492		400	92	260	"		7 50	yes	organ	1				500			12
570	0	260	800	300	"		5 00	no	file	1	1						12
546	145	546	0	0	1,000			no	none	1							15
312		50	50	50	no			"	"		1		8 00				15
182		*	0	0	"			"	"								15
624		450	174	500	"		8 00	yes	organ	1	1			1,000			17
260		260	0	0	"		6 00	"	none	1	1						12
702		450	260	500	"		7 00	"	organ	1	1						21
153		*	0	0	"			no	none				*				15
312		0	0	0	"			"	"		1		8 00				17
156		*	0	0	"			"	"				*				18
468		100	300	0	"			"	"	1			8 00				18
312		0	0	0	"			"	"				3 25				15
312		*	0	0	"			"	"				*				10
390		0	0	0	"			"	"			1	8 00				12
407		100	100	100	"			"	"		1		3 50				16
438		438	0	0	"		7 00	"	"		1		*				17
199		0	0	0	"			"	"								12
108		*	0	0	"			"	"				*				18
849		570	150	0	1,500			yes	organ	2	2		*	2,500	3	12 00	14
390		0	0	0	no			no	none		1		3 50		1	4 00	16
498		498	0	0	"		5 00	"	"		1				2	8 00	13
889		339	50	0	"			"	"					2,500	1	4 00	15
60		*	0	0	"			"	"				*				15
259		*	0	0	1,500			"	"		1		*				16
390	0	390	0	0	no		6 00	yes	"		1				1	4 00	14
575		575	0	0	"		7 00	"	"		1				1	4 00	12
230		*	0	0	"			no	"				*				13
115		*	0	0	"			"	"				*				14
390		0	0	0	"			"	"		1		8 50				14
520	25	420	80	50	1,100	300		yes	"		1				1	4 00	14
312	600	312	0	0	1,400	800		"	"		2					4 00	14
468	50	443	23	160	no		6 50	no	"		2			1,000	1	4 00	14
448	11	398	50	0	1,000	350		yes	no		1		*		1	4 00	16
198		*	0	0	no			no	either								17
468	200	468	0	0	"		7 00	yes	none		3				2	8 00	14
333			100	200	"			no	"		1		8 00				14
460		0	0	0	"			"	"				8 50				21
312	25	372	0	0	825	400		yes	"		1						14
714	0	600	100	0	no		5 00	"	"		1						14
94		*	0	0	"			no	"				*				14

* Gives wages to parents and lives at home.

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed dur.	Cause for loss of time.	Wages received.	
Cabinet-maker	15	Michigan	Germany	s	—	—	0	8m	8m	1	first work	\$6 00 m	
Finisher	16	Germany	"	s	—	—	0	8m	8m	1	no work	8 30 d	
Cabinet-maker	31	Michigan	"	s	—	—	0	5	7	21	not answered	10 00 w	
Machine hand	29	"	"	m	0	0	2	7	4	11	holidays, etc	1 25 d	
Finisher	15	Germany	"	s	—	—	0	8	8	11	no work	16 00 m	
Machine hand	59	"	"	m	5	1	2	16	17	11	—	1 40 d	
"	40	"	"	m	4	4	5	9	1½	12	—	1 40 "	
Cabinet-maker	30	Michigan	"	s	—	—	1	4	4	12	—	1 25 "	
Packer	45	"	"	m	1	1	2	9	9	11½	18	holidays, etc	9 00 w
Machine hand	27	Germany	"	m	1	0	2	1	7	12	—	1 85 d	
Cabinet-maker	64	"	"	m	6	1	2	50	19	12	—	10 00 w	
Finisher	14	"	"	s	—	—	0	5w	5w	1½	first work	8 00 m	
Cabinet-maker	58	"	"	m	4	1	5	11	11	11½	18	holidays, etc	1 15 d
"	60	"	"	m	4	0	2	46	20	12	sickness	—	
"	24	Michigan	"	m	1	0	2	9	9	12	—	10 00 w	
"	38	Germany	"	m	1	0	2	20	7	11½	18	holidays, etc	11 25 "
Finisher	15	"	"	s	—	—	0	1	1	11	sickness	12 00 m	
"	17	"	"	s	—	—	0	2½	2½	12	—	6 00 w	
"	31	Michigan	"	s	—	—	0	6w	6w	12	—	1 00 d	
"	14	Germany	"	s	—	—	0	1	1	12	—	12 00 m	
WEBERMAN M'NF'G CO., HOLLAND.													
Machine hand	47	U. S.	U. S.	s	—	—	0	4	10m	11	accodn't & no wk	1 50 d	
"	16	"	Holland	s	—	—	0	1½	1½	11½	no work	50 "	
Cabinet-maker	57	Holland	"	m	5	0	4	4	1½	11	"	7 50 w	
Turner	26	"	"	s	—	—	0	8	5	6½	"	1 25 d	
Finish'g foreman	22	"	"	m	1	0	2	10	1m	11½	"	2 50 "	
Round-worker	18	"	"	s	—	—	0	½	½	10	"	50 "	
Machine hand	16	U. S.	"	s	—	—	0	2	2	11½	"	1 00 "	
Cabinet-maker	26	Holland	"	m	1	0	2	1	1	11½	"	1 25 "	
Carpenter & Joiner	58	U. S.	U. S.	m	4	2	4	20	2	11½	"	9 00 w	
Round-worker	17	"	Holland	s	—	—	0	1	1	11½	"	80 d	
Sand-paperer	14	"	"	s	—	—	0	1m	1m	11½	"	40 "	
Machine hand	18	"	"	s	—	—	0	1	1	10	"	80 "	
"	16	"	"	s	—	—	0	1½	1½	11½	"	1 00 "	
Cabinet-maker	22	Holland	"	m	1	0	2	8	7m	11½	"	10 00 w	
Gluer	62	"	"	m	5	3	6	35	2	11½	"	1 50 d	
Sand-paperer	14	U. S.	"	s	—	—	0	3w	3w	12	—	2 00 w	
Varnisher	21	Holland	"	m	1	0	2	6	½	11½	18	no work	1 50 d
Round-worker	56	"	"	m	3	0	4	2	2	12	—	1 25 "	
Cabinet-maker	23	U. S.	"	m	1	0	2	2m	2m	11	26	no work	1 00 "
Carpenter & Joiner	49	Holland	"	m	4	2	4	18	8m	11½	12	"	8 00 w
Sand-paperer	36	Germany	Germany	m	1	0	2	8w	3w	10½	28	"	1 00 d
Varnisher	26	U. S.	U. S.	m	1	0	2	2	1½	9½	72	"	2 25 w
"	24	Holland	Holland	s	—	—	0	8	5w	8	104	"	25 d
R. & A. M. KANTERS FURT. CO., HOLLAND.													
Cabinet-maker	29	U. S.	Holland	m	2	1	0	10	5w	11½	12	"	2 00 "
"	27	Holland	"	s	—	—	0	4	½	11½	12	"	2 00 "
Machine hand	19	"	"	s	—	—	0	4	½	11½	6	"	1 25 "
Mach. foreman	26	U. S.	"	m	0	0	1	8	1	11½	12	"	2 00 "
Gluer	17	"	"	s	—	—	0	½	8m	8	—	first work	2 00 w
Machine hand	38	Holland	"	m	2	2	3	½	½	10½	20	no work	1 25 d
Round-worker	16	U. S.	"	s	—	—	0	½	½	8	—	first work	2 00 w
Machine hand	16	Holland	"	s	—	—	0	½	1w	11	26	no work	2 40 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily paper.	Weekly paper.	Magazines.					
364			*	0	no			no	none				*				15
82			0	0	no			no	no				*				14
498			0	\$1,100	no			yes	violin				\$3 00	\$2,500			14
374		8374	0	100	no			no	none				*			\$4 00	13
168			*	0	no			no	no								
437	\$7	437	0	1,000	\$2,500			no	no					1,000			16
487	100	487	0	0	no		\$3 00	yes	no								14
390		390	0	0	800			no	no								14
448		448	0	0	no		8 00	no	organ					2,000			26
421	0	421	0	0	no		7 00	no	none								14
520	25	400	\$100	1,800	2,000			no	organ		1						14
10			0	0	no			no	none				*				14
344	100	344	0	2,000	8,000	\$800		yes	no		1						15
150	2		0	500	1,500			no	organ		1						18
520		386	125	0	no		6 50	no	none		1				1	4 00	13
500	8	275	300	0	1,200	500		no	zither		3				2	8 00	14
132			*	0	no			no	none				*				14
812	0		*	0	no			no	no				3 00				13
812			0	55	no			no	no				*				8
144			*	0	no			no	no				*				13
429			50	0	600	200		no	no		1		3 00				15
149			*	0	no			no	no		1		*				14
357	0	300	0	0	no		6 00	no	no		1		*				12
308			*	0	no			no	no		1	1	*				18
733		500	0	0	no		6 00	yes	no		1						12
130			*	0	no			no	no				*				15
299			*	0	no			no	no				*				14
374		300	25	0	no		3 50	no	no				*				14
745		375	100	0	1,500	250		yes	no		1		*				14
175			*	0	no			no	no				*				13
120			*	0	no			no	no				*				12
208			*	0	no			no	no				*				17
399			*	0	no			no	no				*				14
498		250	0	0	no		6 00	yes	organ		1		*				14
445		400	0	0	500			no	none								13
104			0	0	no			no	no		1						12
445		350	50	0	no		6 00	no	no		1	1					11
540	0	400	50	0	no			yes	no		1						13
286			25	0	no		3 00	no	no		1			1,000			14
398		450	0	0	700			no	no		1	1					14
273	0	250	0	0	no		4 25	no	no		1	1					14
831		250	50	75	no		4 50	yes	no		1		1				14
280			0	0	no			no	no				3 00				12
598		300	0	700	no		7 00	yes	piano		1	1		1,000	2	10 00	16
598		100	1,000	no	no			no	none		3	1	3 75				11
382			0	0	no			no	no		1		+				15
598		300	100	0	1,800	700		yes	no		1			1,000			14
104			*	0	no			no	no		1		*				16
341		300	0	0	no		5 00	yes	no		1		*				12
39			*	0	no			no	no				*				16
114			*	0	no			no	no				*				14

* Gives wages to parents and lives at home. † Lives with parents and pays no stated amount.

TABLE NO. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
Finisher	31	U. S.	Holland	m	2	1	3	3	5w	11½	13	no work	\$1 05 d
Saundpaperer	17	"	"	s	0	0	0	0	2w	10½	30	"	75
Foreman	34	"	U. S.	w'r	4	3	4	17	1m	12	23	"	2 25 "
Filler	17	"	Holland	s	0	1	0	1	8w	11½	13	no work	1 00 "
Machine hand	16	Holland	"	s	0	0	0	1m	1m	11	28	"	2 50 w
Filler	28	"	"	s	0	0	0	1w	1w	9	78	"	75 d
Cabinet-maker	45	Germany	Germany	m	0	0	13½	2m	11	28	28	"	1 50 "
Machine hand	45	U. S.	England	m	4	3	5	12	1	10½	39	"	2 00 "
Rubber	18	"	U. S.	s	0	0	0	0	12	12	12	"	1 00 "
Cabinet-maker	30	Prussia	Poland	s	0	0	0	4	7m	7	---	first wrk in U. S.	1 50 "
G. N. & J. W. POTTER, POTTERVILLE.													
Machine hand	48	New York	U. S.	w'r	0	0	0	14	10	9½	59	accident	1 50 "
"	20	Ohio	"	m	1	0	0	2	2	11	28	no work	1 00 "
Foreman	33	New York	Germany	m	1	0	2	12	12	12	28	"	2 50 "
Sawyer	18	"	U. S.	m	0	0	2	4	4	11	28	no work	75 "
Laborer	28	"	"	m	1	0	2	4	4	10½	39	"	1 25 "
"	25	"	"	m	1	0	2	6	4	11	26	"	1 25 "
Sawyer	23	"	"	m	1	0	2	6	6	12	26	"	1 50 "
Machine hand	20	Ohio	"	s	0	0	0	4	4	11½	19	shut down	1 00 "
Laborer	17	Michigan	"	s	0	0	0	3	3	11	28	"	75 "
Sawyer	20	Ohio	"	s	0	0	1	2	2	11½	19	"	1 00 "
Laborer	42	Germany	Germany	m	3	3	5	3	1	12	26	"	1 00 "
"	18	Michigan	U. S.	s	0	0	0	2	2	11	26	"	1 00 "
Teamster	28	Ohio	Germany	s	1	0	1	12	10	12	26	"	20 00 m
Machine hand	24	"	U. S.	s	0	0	0	4	4	11	26	"	1 25 d
Turner	28	Michigan	"	m	0	0	1	12	1	11½	19	"	1 25 "
Laborer	60	New York	"	m	2	2	3	6	6	9½	59	sick and no wrk	6 81 w
"	45	"	"	m	4	3	5	4	4	10½	39	accident	1 00 d
Sawyer	24	Ohio	"	s	0	0	0	1	1	11	26	no work	1 25 "
"	27	"	"	m	1	0	2	5	5	12	26	"	1 25 "
Machine hand	38	New York	"	m	3	0	3	10	10	11½	13	shut down	1 50 "
Laborer	24	Missouri	"	m	1	0	2	4	4	12	26	"	1 25 "
Engineer	46	Ohio	"	m	7	4	8	2	2	12	26	"	1 50 "
Finisher	37	Michigan	"	m	0	0	1	2	2	11½	13	shut down	1 25 "
Machine hand	40	New York	"	m	3	1	4	12	12	11	26	sick, shut down	1 50 "
Night watch	22	Ohio	"	m	0	0	1	4m	4m	12	26	"	1 50 "
Cabinet-maker	47	New York	"	m	2	1	2	3	3	11½	13	shut down	1 50 "
Foreman	49	"	"	m	0	0	1	4	4	11½	13	"	1 50 "
Sawyer	36	Ohio	"	m	2	1	2	6	6	11½	19	sick, shut down	1 00 "
Laborer	62	New York	"	m	1	1	2	4	4	6	156	sick, accident	1 50 "
Machine hand	16	Michigan	"	s	0	0	0	4	4	9	78	at school	75 "
Finisher	43	New York	"	m	4	4	6	2	2	11½	13	shut down	1 25 "
Machine hand	23	Michigan	"	s	0	0	1	6	6	11½	13	"	1 50 "
Laborer	38	New York	"	m	3	3	4	4	4	12	26	"	1 25 "
"	20	Michigan	"	s	0	0	0	1	1	11½	13	shut down	75 "
Painter	37	"	"	m	2	1	3	12	12	11½	13	vacation	8 25 w
Machinist	38	New York	"	m	0	0	1	10	10	11½	19	away, shut d'wn	1 50 d
Finisher	36	"	"	s	1	0	1	15	8m	10	52	traveling	1 50 "
Laborer	52	"	"	m	2	1	3	1	1	12	26	"	1 25 "
Turner	16	Michigan	"	s	0	0	4	4	4	12	26	"	1 00 "
Laborer	15	"	"	s	0	0	0	8m	8m	8	---	first work	60 "

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.	If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$448		\$348	\$200	\$380	no		\$5 50	yes	none						13
206			* 0	0	"			no	"						14
702		500		0	"		7 00	"	"	1					17
299				0	"			"	"						15
119			* *	0	"			"	"						14
175			*	0	"			"	"	1					14
429	0	400	0	0	\$800	\$400		"	"	1					14
548	0	400	100	0	800	650		yes	organ	1					8
312			25	25	no			no	none	1					13
273	0		0	0							\$3 75				13
380			75	150	"			"	"		3 00				14
286			0	0	"			"	"		3 00				12
780		850	200	0	700			yes	"	1					12
214		214	0	75	850			"	"	1					14
341		341	0	0	no		3 00	no	"						16
357		357	0	0	"		3 00	"	"						14
446		350	75	50	600			yes	"	1					14
292		53	0	0	no			no	"		2 50				14
214			* *	0	"			"	"		*				14
292				0	"			"	"		*				16
262	\$50	312	0	0	300			"	"						12
296			*	0	no			"	"		*				15
240	100	100	0	0	350			"	"						12
357		75	0	0	no			"	"		3 00				14
366		366	0	0	"		4 00	yes	"	1					16
738		338	0	0	450			"	"	1					14
273		273	0	0	no		2 00	no	"						10
357		0	0	0	"			"	"		2 00				14
380		380	0	0	"		4 00	"	"	1					14
448		400	48	0	700			yes	"	1					14
390		390	0	0	no		4 00	"	"						12
543		543	0	0	"			no	"						14
774		800	50	0	800			yes	"						15
504		504	0	0	400	80		"	"	1					18
498		498	0	0	no		4 00	no	"						12
498		498	0	0	1,100			yes	organ	1	2				16
448		448	0	0	800			"	"	1	1				16
357		357	0	0	350			"	none	1					14
284		284	0	0	800			"	"						10
175			*	0	no			no	"		*				12
374		374	0	0	900	200		yes	"	1	3				14
448		448	0	0	600			"	organ		1				11
390		390	0	0	no		free	"	none		1				12
224			0	50	"			no	"		†				10
411		411	0	0	1,000			yes	organ	1	2				12
439		439	0	0	no		5 00	"	"	1	1				18
390		300	90	300	no			no	none	1		3 00			14
390		390	0	0	300			"	"						12
372			* 0	0	no			"	"						12
125				0	no			"	"		*				14

* Gives wages to parents and lives at home. † Lives with parents and pays no stated amount.

TABLE No. 17.—CONTINUED.—Showing Individual Reports.

Occupation.	Age.	Where born (State or Country.)	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years with present employer.	No. of months employed during the year.	No. of days of time during the year.	Cause for loss of time.	Wages received.
CONVERSE FURNITURE CO., NEWAYGO.												
Machine hand.	18	Sweden.	Sweden.	s	—	—	—	4	6	156	no work	\$1 00 d
Cabinet-maker.	44	"	"	s	—	—	—	1m	11	26	"	1 75 d
Finisher.	23	Ohio	Ireland	s	—	—	—	2	11	26	"	8 00 w
Machine hand.	18	Michigan.	Scotland.	s	—	—	—	1	11	26	shut down	75 d
Finisher.	26	Illinois.	England	s	—	—	—	1	12	—	—	1 25 "
Laborer.	20	New York.	"	s	—	—	—	1	12	—	—	8 00 w
Cabinet-maker.	20	Holland.	Holland.	s	—	—	—	2½	11½	12	shut down	1 00 d
Machine hand.	27	Wisconsin.	France.	s	—	—	—	2	12	—	—	15 00 w
Packer.	27	New York.	U. S.	m	0	0	—	1	12	—	—	2 00 d
Carver.	40	"	Ireland.	s	—	—	—	2	11	26	shut down	2 00 "
Finisher for man.	30	Ohio	Germany	m	2	0	—	5	11½	12	sickness	15 00 w
Finisher.	16	Michigan.	England	s	—	—	—	2½	10	52	no work	1 75 d
Machine hand.	26	Sweden.	Sweden.	m	3	2	—	1m	12	—	—	6 00 "
Machine hand.	14	Michigan.	England	s	—	—	—	1	11½	12	shut down	1 25 d
"	15	Sweden.	Sweden.	s	—	—	—	4	11	26	"	2 40 w
Cabinet-maker.	22	"	"	s	—	—	—	8w	1½	—	not in U. S.	5 00 "
Machine hand.	26	New York.	England	s	—	—	—	3	10	52	no work	6 75 "
Finisher.	22	"	Ireland.	s	—	—	—	1w	12	—	—	10 00 "
Cabinet-maker.	74	"	England	m	7	0	—	½	12	—	—	2 50 d
Machine hand.	26	Germany.	Germany	s	—	—	—	4	11	26	no work	1 25 "
Laborer.	22	Michigan.	England	m	2	1	—	1	11	26	"	1 25 w
Machine hand.	49	Germany.	Germany	m	7	3	—	2	10	52	sickn's & shut d'wn	1 25 "
Finisher.	23	Vermont.	U. S.	s	—	—	—	1m	12	—	—	10 50 w
Machine hand.	20	Michigan.	England	m	3	0	—	1	11	26	shut down	1 25 d
Cabinet-maker.	22	New York.	Scotland	s	—	—	—	1m	10	52	no work	1 50 "
Machine hand.	20	"	U. S.	s	—	—	—	4	11½	12	shut down	6 25 w
Finisher.	23	Sweden.	Sweden.	m	3	0	—	2½	12	—	—	10 00 "
Cabinet-maker.	67	Canada.	England	m	2	0	—	1½	9	78	away fr'm home	12 00 "
Finisher.	28	Holland.	Holland.	m	4	4	—	½	12	—	—	1 50 d
Cabinet-maker.	20	Sweden.	Sweden.	s	—	—	—	1	11	26	shut down	6 75 w
Trimmer.	47	N. H.	U. S.	m	3	1	—	1	10	52	sickness	1 75 d
Finisher.	22	Sweden.	Sweden.	s	—	—	—	½	11½	12	"	1 25 "
Cabinet-maker.	48	England.	England.	m	3	1	—	1	10	52	other business	7 50 w
A. E. PALMER, HILLSDALE.												
Finisher.	17	Michigan.	U. S.	s	—	—	—	m	7m	9½	not answered	8 00 "
Upholsterer.	23	Illinois.	"	s	—	—	—	1	11	26	no work	2 50 d
"	26	Ohio.	"	m	1	0	—	2	9	78	"	1 25 "
"	20	Michigan.	Ireland	s	—	—	—	3	10	52	"	1 25 "
"	18	Wisconsin.	U. S.	s	—	—	—	3	9	78	"	50 "
"	23	Illinois.	England	m	1	0	—	½	9½	78	"	9 00 w
"	18	Michigan.	U. S.	s	—	—	—	½	9	78	"	50 d
"	19	"	"	s	—	—	—	½	9	78	"	1 00 "
Finisher.	17	"	"	s	—	—	—	1	11½	6	"	4 00 w
"	21	"	"	s	—	—	—	0 5	2½	12	—	7 50 "
Upholsterer.	21	"	"	s	—	—	—	0 4½	4	52	no work	18 00 "
Packer.	17	"	"	s	—	—	—	0 7m	7m	78	"	3 00 "
Finisher.	30	Ohio.	"	m	3	0	—	2 5	3	39	"	10 00 "
Machinist.	30	"	"	m	2	0	—	5 4	9	78	"	9 00 "
Turner.	59	"	"	m	1	0	—	1 35	4m	9½	not answered	12 00 "
Cabinet-maker.	48	N. Jersey.	"	m	1	0	—	2 16	1	11½	vacation	12 00 "
"	30	Michigan.	"	s	—	—	—	0 8	1½	11½	no work	12 00 "
Upholsterer.	37	Germany.	Germany	m	3	3	—	4 20	5	12	—	3 75 d
Cabinet-maker.	48	New York.	U. S.	w'r	3	0	—	2 31	5½	11½	vacation	12 00 w
Upholsterer.	37	Michigan.	"	m	2	0	—	3 17	2½	9	no work	12 00 "
"	31	Germany.	Germany	m	3	0	—	3 14	1	10½	sickness	15 00 "

TABLE No. 17—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
										Daily papers.	Weekly papers.	Magazines.					
\$154			0	0	no			no	none				\$3 50				14
500	\$50		0	0	"			"	"				4 00				15
381			\$25	0	"			"	"		1		3 00				14
214			0	0	"			"	"			1	2 50				18
357			0	0	"			"	"			1	3 00				16
416			0	\$300	"			"	"		1		3 00				17
312			0	0	"			"	"				3 25				15
747	0		200	900	"			"	"		1	1	4 00				10
634			20	0	"			"	"				4 00				14
624		\$624	0	1,100	"		\$6 25	yes	organ		1	1					14
715			50	0	"			no	none		1		3 50				14
635		500	0	0	\$1,000	\$100		yes	organ					\$1,000			14
200			0	0	no			no	none				3 00				12
360		192	50	0	500	300		yes	"				*				14
120			*	0	no			no	"								10
238			*	0	"			"	"				*				11
44	10		0	0	"			"	"				3 00				14
438	0	200	0	0	"		5 00	yes	"		1	1		1,000			12
730			100	0	"			no	"				3 50				12
360			50	0	"			"	"				3 00				16
312		100	100	0	200			"	"			1					18
357	0		0	0	no			"	"				3 00				14
360		360	0	0			4 00	yes	"			2					12
325	0	325	0	0	1,000			no	"								15
546			0	0	no			no	"				3 50				15
357		357	0	0	500	50		yes	"			1					16
360			50	100	no			no	"		1		3 50				12
411			75	0	"			"	"		2		3 00				16
530	0	300	100	0	"		3 00	yes	"			1	2				12
468		200	0	0	300	150		"	organ			2	2				14
468	0	468	0	0	600	100		"	none								10
322	25		0	0	no			no	"			1	3 00				10
360		360	0	0	600			"	organ		1	3					20
374	25		200	0	no			"	none			1	3 00				16
325		325	0	0	500			yes	"		1	2	2				16
120			10	0	no			no	"			2					16
715			50	50	"			"	"		1		4 50	2,000	1	\$5 00	15
302		202	0	0	"		8 00	"	piano			1					22
335			0	0	"			"	none				3 50				17
117			0	0	"			"	"				3 00				16
351		312	0	0	"		4 00	"	organ					3,000			16
117			0	0	"			"	none				1 50				14
284			0	0	"			"	"			2					15
204			0	0	"			"	"				2 00				18
360			0	25	"			"	violin				3 25				12
563			0	20	"			"	none		1	1	2 50				12
117			0	0	"			"	"			1	2 00				13
455		455	0	0	"		6 00	"	"								14
351		250	100	0	600			yes	"		1	2					16
507		300	100	0	1,500			"	"		1	1					9
611		611	0	500	1,000			"	piano			3		1,000			16
611			100	0	no			no	violin		1		3 50				16
558		700	0	0	"		8 00	yes	organ		1						16
611		600	0	0	"		7 00	"	none		1	1		1,000			20
488		300	0	20	"		7 00	no	"			2		1,000			16
623		600	0	0	"		7 00	yes	"		1	1					15

* Gives wages to parents and lives at home. † Lives with parents and pays no stated amount.

TABLE NO. 17.—CONTINUED.—*Showing Individual Reports.*

Occupation.	Age.	Where born (State or Country).	Nativity of parents.	Married or single.	No. of children in family.	Number of children attending school.	How many depend on you for support.	No. of years at present occupation.	No. of years with present employer.	No. of months employed during the year.	No. of days of lost time during the year.	Cause for loss of time.	Wages received.
SKALLA FURNITURE CO., NILES.													
Varnisher.....	26	Germany.	Germany.	m	1	0	2	1 1/4	1 1/4	12	---	no work	\$1 00 d
Machine hand.....	28	Michigan.	"	m	0	0	1	4	7m	7	180	break down	1 25 "
Teamster.....	30	New York.	Holland.	s	---	---	0	5	2	11 1/2	12	invoice & repairing	8 00 w
Machine hand.....	32	Michigan.	"	s	---	---	2	4	4	11 1/2	12	invoice & repairing	1 25 d
Machine hand.....	37	New York.	"	m	1	1	2	2	1/2	12	---	---	8 00 w
Bench-hand.....	35	Michigan.	Austria.	s	---	---	0	9	9	12	---	---	1 75 d
Machine hand.....	35	"	"	m	0	0	1	10	7	12	---	---	1 75 "
Bench-hand.....	35	Kentucky.	Germany.	m	2	1	3	10	8	12	---	---	12 50 w
Rubber and polish'r.	23	Michigan.	Negro.	s	---	---	3	5	2	11 1/2	6	invoice	1 50 d
Bench-hand.....	45	Indiana.	Ireland.	m	3	1	3	7	1	11 1/2	12	invoicing	9 00 w
Packer.....	23	Illinois.	Holland.	s	---	---	0	3	2 1/4	11	26	no work	1 25 d
Varnisher.....	27	Wisconsin.	Austria.	s	---	---	0	10	10	12	---	---	1 75 "
Fireman.....	29	Michigan.	Ireland.	s	---	---	1	3	3	11 1/2	12	invoice & repairs	1 20 "
OLIVER & CO., ALLEGAN.													
Finisher.....	33	Michigan.	Scotland.	s	---	---	0	12	6	10	52	vacation	9 00 w
Machine hand.....	50	Germany.	Germany.	m	2	1	3	24	24	10	52	not answered	1 25 d
Machine hand.....	27	Michigan.	U. S.	m	1	0	2	1	1	10	52	sickness & no work	1 25 "
Finisher.....	34	"	"	m	1	1	2	15	6	8	104	no work	8 00 w
Machine hand.....	33	Russia.	Russia.	s	---	---	0	10	10	10	52	vacation	1 50 d
" ".....	40	Germany.	Germany.	m	4	3	5	8	8	10	52	sickness & no work	1 50 "
Furniture workman	60	Switz.	Switz.	m	2	1	3	24	24	8	104	accident	1 25 "
Finisher.....	24	Michigan.	U. S.	s	---	---	0	6	4	11	26	vacation	9 00 w
Machine hand.....	24	"	"	m	1	1	2	16	16	9	78	sickness	1 50 d
" ".....	34	"	"	m	3	0	6	9	9	10	52	sickness & no work	1 25 "
" ".....	59	Germany.	Germany.	m	3	3	4	52	25	11	26	sickness	7 50 w

TABLE No. 17.—CONTINUED.—*Showing Individual Reports.*

Annual earnings of yourself and family.	Amount of money on arrival in U. S.	Annual family expenses.	Amount saved during the year.	Amount at interest or in bank.	Do you own your home, its value.	If mortgaged, for what amount.	If renting home, monthly rental.	Have you a sewing machine.	What musical instruments have you.	No. of newspapers and magazines taken.			If boarding, cost per week, including room.	How much life insurance have you.	How many benefit societies do you belong to.	Weekly benefit in case of sickness or accident.	Age began work.
\$312	\$5	\$312	0	0	\$500	-----	-----	yes	violin	-----	1	-----	-----	-----	-----	-----	12
227	-----	227	0	0	no	-----	\$3 00	no	none	-----	1	-----	-----	-----	-----	-----	18
369	-----	-----	0	0	"	-----	-----	"	"	-----	1	-----	-----	-----	-----	-----	14
374	-----	374	-----	\$360	700	-----	-----	yes	"	-----	1	-----	-----	-----	-----	-----	18
416	-----	416	0	0	no	-----	6 00	no	"	-----	1	-----	-----	-----	-----	-----	17
546	-----	-----	\$130	700	"	-----	-----	"	"	-----	1	-----	8 00	-----	-----	-----	15
548	-----	496	50	200	800	-----	-----	"	"	-----	1	-----	-----	-----	-----	-----	15
825	-----	725	100	300	1,000	-----	-----	yes	"	-----	1	-----	-----	5,000	1	5 00	12
458	-----	458	0	800	no	-----	6 00	"	"	-----	1	-----	-----	-----	-----	-----	15
478	-----	478	0	0	no	-----	8 00	"	violin	-----	1	-----	-----	-----	-----	-----	15
386	-----	-----	25	77	"	-----	-----	no	banjo	-----	1	-----	3 50	-----	-----	-----	19
548	-----	-----	175	600	-----	-----	-----	"	none	-----	1	-----	3 00	-----	-----	-----	17
389	-----	389	0	0	400	-----	-----	yes	"	-----	1	-----	-----	-----	-----	-----	18
390	-----	-----	0	0	no	-----	-----	no	"	-----	-----	-----	3 00	-----	-----	-----	18
625	40	325	0	0	300	-----	-----	yes	"	-----	1	-----	-----	500	1	3 00	15
340	-----	290	0	0	no	-----	4 00	"	"	-----	2	-----	-----	-----	-----	-----	15
377	-----	256	25	0	600	\$30	-----	"	"	-----	-----	-----	-----	-----	-----	-----	9
390	-----	-----	120	0	no	-----	-----	no	"	-----	1	-----	3 00	-----	-----	-----	12
390	0	320	40	0	800	200	-----	"	"	-----	-----	-----	-----	500	1	3 00	10
250	10	240	0	0	600	-----	-----	yes	"	-----	-----	-----	-----	500	1	3 00	7
459	-----	-----	0	0	no	-----	-----	no	"	-----	-----	-----	3 00	-----	-----	-----	13
381	-----	381	0	0	800	-----	-----	yes	"	-----	1	-----	-----	-----	-----	-----	16
325	-----	275	20	0	800	300	-----	no	"	-----	1	-----	-----	-----	-----	-----	17
357	50	357	0	0	600	200	-----	yes	"	-----	-----	-----	-----	500	1	3 00	7

TABLE No. 18.—Showing the totals of Table No. 17 by

Name of Firm.	Whole number canvased.	Number married.	Number single.	Total number of children in families.	Number of children attending school.	Total number of persons dependent for support.	Average number of months employed.	Total annual earnings.	Total amount of family expenses during the year.
OWEGO:									
Estey Manufacturing Co.....	161	100	61	207	85	310	10.5+	\$58,153	\$97,868
Woodward Bros.....	55	38	23	46	21	81	10.5+	20,068	9,022
Robbins Table Co.....	16	8	18	6	8	12	10.1+	4,781	1,750
NORTHVILLE:									
Globe Furniture Co.....	154	113	41	184	102	309	11.5	71,025	48,063
Granville Wood & Son, Pipe Org. Co.	10	7	3	16	10	24	11.0+	5,955	4,267
Ely Dowel & Manufacturing Co.....	7	8	4	6	2	5	10.5+	2,698	979
ADRIAN:									
Adrian Furniture Manufacturing Co.	106	85	71	81	26	109	11.0+	41,922	16,601
CHARLOTTE:									
Curtis & Bennett.....	48	34	14	79	43	104	10.9+	19,015	12,164
Charlotte Manufacturing Co.....	34	23	11	35	11	55	10.7+	13,080	7,781
Houck & Perkins.....	19	18	6	36	15	46	11.1+	7,312	4,163
STURGIS:									
Aulsbrook & Sturges.....	53	34	19	95	33	108	11.1+	22,066	13,076
Grobhiser & Crosby Furniture Co....	23	17	6	51	22	63	10.1+	8,343	6,101
Walt & Barnes Furniture Co.....	20	12	8	44	24	54	11.0+	8,561	4,668
MANISTEE:									
Filertown Manufacturing Co.....	49	22	27	43	12	68	9.9+	18,952	8,261
Manistee Manufacturing Co.....	44	16	28	35	21	54	10.7+	16,340	7,932
ST. JOHNS:									
St. Johns Manufacturing Co.....	93	46	47	100	43	143	10.7+	33,906	15,352
OTSEGO:									
C. D. Stuart.....	93	62	31	110	61	179	10.9+	34,115	20,736
MUSKEGON:									
Muskegon Valley Furniture Co.....	58	26	32	66	28	97	11.0+	25,462	13,153
Kelly Bros. Manufacturing Co.....	29	16	13	36	20	55	11.2+	15,970	8,123
BIG RAPIDS:									
Crescent Furniture & Man'g Co.....	55	24	31	50	30	70	9.7+	20,688	10,697
Big Rapids Furniture Co.....	12	7	5	25	15	37	9.	4,091	2,775
GRAND LEDGE:									
Grand Ledge Chair Co.....	64	21	43	29	15	50	11.6+	20,351	9,757
SPARTA:									
Welch Folding Bed Co.....	63	31	32	52	19	98	10.9+	28,617	12,343
SAGINAW:									
Ring-Brady Co.....	47	13	34	11	-----	29	9.2+	16,430	6,137
BUCHANAN:									
Spencer & Barnes.....	46	31	15	54	28	89	9.2+	13,170	10,230
Osborn Furniture Co.....	9	7	2	12	4	19	8.4+	3,029	2,689
CONSTANTINE:									
Empire Furniture Co.....	46	25	21	45	13	62	11.8+	20,833	10,085
ANN ARBOR:									
Michigan Furniture Co.....	43	22	21	62	20	69	10.8+	15,113	9,356
HOLLAND:									
Werkman Manufacturing Co.....	23	12	11	28	7	36	10.8+	7,841	4,075
R. & A. M. Kanters Furniture Co....	18	7	11	14	10	20	10.2+	6,252	2,448
POTTERVILLE:									
G. N. & J. W. Potter.....	40	26	14	44	25	77	11.0+	14,655	10,345
NEWAYGO:									
Converse Furniture Co.....	35	13	22	40	12	43	10.7+	14,202	4,371
HILLSDALE:									
A. E. Palmer.....	21	10	11	18	3	27	10.1+	8,909	4,420
NILES:									
Skalla Furniture Co.....	13	6	7	7	3	18	11.3+	5,897	3,970
ALLEGAN:									
Oliver & Co.....	11	8	8	17	10	27	9.7+	4,164	2,424
	1,613	878	740	1,784	780	2,636	10.7+	\$629,501	\$347,967

firms in the State outside of Grand Rapids and Detroit.

Total amount saved during the year.	Total amount at interest or in bank.	Number owning homes.	Total value of homes.	Number of homes mortgaged.	Total amount of mortgages.	Number renting.	Average monthly rental.	Number boarding.	Average cost per week for board and room.	Total number having life insurance.	Total amount of life insurance.	Total number belonging to benefit societies.	Average weekly benefit.
\$6,126	\$7,775	75	\$76,500	51	\$15,330	24	\$7 26	40	\$2 98	31	\$57,500	13	\$9 48
2,949	801	14	15,350	7	3,193	16	6 87	23	2 97	6	7,275	1	20 00
225		3	4,500	2	750	1	9 50	10	3 65				
10,403	10,975	79	98,925	52	26,265	36	6 57	25	3 13	41	69,000	110	6 58
450	200	4	6,200	2	875	3	9 33	3	3 25	4	6,000	2	5 00
100	50	1	2,000	1	700	1	7 00	4	3 75	1	1,000	1	3 00
3,145	4,850	15	20,200			17	6 11	68	3 37	9	15,400	19	4 44
1,389	850	12	12,300	4	1,100	16	5 29	14	2 87	8	10,850	8	3 50
1,844	3,200	9	7,900	4	615	12	5 58	12	3 91	7	12,700	3	3 00
550		8	10,900	4	1,100	5	5 80	3	2 33			1	3 00
2,615	5,425	24	17,045	8	1,955	9	4 11	11	2 66	3	2,450	4	1 75
67		3	1,525	2	700	12	4 79	3	3 50	3	2,530	1	3 00
355		10	6,300	5	1,500	2	4 50	5	4 60	1	600	3	8 18
1,859	1,200	15	10,050	2	1,000	10	4 80	17	3 36	1	1,000	4	5 00
615	150	6	8,700	2	350	14	6 69	16	3 26	3	4,200	1	5 00
5,315	3,940	33	27,505	26	12,494	17	6 17	34	2 71	16	24,200	56	3 37
3,526	5,745	39	25,490	10	2,734	22	5 31	28	2 75	6	8,000		
604	50	12	9,900	3	1,275	13	6 50	15	4 38	5	8,250	10	5 26
450	1,025	8	10,800	2	600	8	7 12	7	4 50	4	7,000	12	8 75
1,709	310	9	5,225	6	1,315	15	6 76	26	3 34	5	12,250		
150	50	4	2,600	2	600	3	4 66	4	2 75				
925	55	10	10,300			13	4 65	26	2 44	2	2,000		
4,016	9,368	12	12,175	5	1,085	15	5 15	23	3 11	9	12,250	2	5 00
784	2,710	8	2,000	3	225	10	6 50	17	3 47	7	15,600	7	7 85
1,720	100	12	8,050	4	810	20	5 23	13	2 73	2	3,000		
150		2	1,750	1	200	5	5 05	1	1 50			1	3 00
3,878	7,630	9	6,455	4	1,150	19	6 65	16	2 68	6	4,700	2	4 00
1,080	6,955	12	18,325	6	3,250	10	6 60	6	3 25	6	11,500	14	5 42
350	75	4	3,300	2	450	8	4 90	2	3 00	1	1,000		
525	2,055	3	2,700	3	1,750	4	6 12	2	3 75	2	2,000	1	10 00
763	625	17	10,500	2	230	8	3 62	6	2 75	1	1,000	1	6 00
1,020	2,400	9	5,700	5	700	4	4 56	20	3 26	2	2,000		
360	615	3	3,100			7	6 71	9	2 86	5	8,000	1	5 00
480	2,527	5	3,200			4	5 50	4	3 26	2	5,500	2	4 26
206		7	4,400	4	730	1	4 00	3	3 00	4	2,000	4	3 00
\$60,206	\$30,711	491	\$471,870	236	\$55,080	384	\$5 77	516	\$2 99	206	\$320,755	284	\$5 74

LABOR AND INDUSTRIAL STATISTICS.

TABLE No. 19. — Showing by age the number canvassed in each factory in the State outside of Grand Rapids and Detroit, the average number of months employed, average annual earnings, and the average family expense per capita.

Name of Firm.	Location.	All over 19 years of age.				From 15 to 19 years.				15 Years and under.				
		Number canvassed.	Average number of months employed.	Average annual earnings.	Families only.	Number canvassed.	Average number of months employed.	Average annual earnings.	Number canvassed.	Average number of months employed.	Average annual earnings.			
Essey Manufacturing Co.	Owosso.....	127	10.7+	\$410 74	No. of families canvassed.	Total annual family expense.	No. of persons supported.	Average annual family expense per capita.	24	10.3+	\$210 25	10	8.9	\$235 20
	45	10.4+	280 51	121											87 31	7	10.4+	226 71
Woodward Bros.	".....	8	9.4+	270 87	4	1,750	15	109 57	7	10.5+	224 85	1	11.5	174 00
Robbins Table Co.	Northville.....	139	11.5+	438 10	115	43,053	456	105 37	13	11.8+	275 95	2	9.	145 00
Globe Furniture Co.	".....	9	11.0+	629 88	7	4,267	29	186 53	1	11.	226 00			
	".....	5	11.9+	455 40	2	979	6	163 16	3	7.	170 50			
Adrian.....	".....	59	11.3+	525 74	33	16,001	145	114 45	40	10.7+	243 92	7	10.7+	144 25
Charlotte.....	".....	41	10.5+	407 73	28	12,164	137	83 78	5	11.5+	223 26			
".....	".....	31	10.6+	388 29	21	7,751	73	99 75	3	11.6+	244 26			
".....	".....	13	11.1+	365 72	13	4,163	59	70 55	1	12.	251 00			
Sturgis.....	".....	44	11.3+	451 84	20	13,076	135	93 85	6	10.3+	208 50	3	11.	172 00
".....	".....	15	8.9+	368 86	15	6,101	79	77 22	3	11.3	224 50	3	11.3+	196 23
Manistee.....	".....	17	10.9+	423 05	13	4,883	63	75 23	3	11.5+	221 56			
".....	".....	25	10.6+	501 04	20	7,933	71	113 14	7	10.4+	223 33	6	7.5	111 66
St. Johns.....	".....	26	11.0+	414 75	50	15,353	133	85 22	13	10.3+	251 16	7	10.3+	145 71
Otsego.....	".....	78	10.8+	337 82	50	20,756	226	35 07	13	10.6+	253 83	3	10.5	200 33
Muskegon.....	".....	70	11.0+	539 71	61	12,153	116	113 25	13	11.4+	203 50	3	11.1+	192 50
".....	".....	33	11.2+	633 06	25	8,133	69	117 72	12	12.	249 50	3	9.3+	159 27
".....	".....	23	11.6+	435 11	16	8,133	69	117 72	4	8.6	201 00	4	9.5	227 50
Big Rapids.....	".....	44	10.0+	498 00	24	10,897	97	110 27	5	7.7+	206 65	6	7.7+	227 50
".....	".....	8	10.3+	413 87	7	2,775	35	73 03	3	7.6+	201 00	1	8.	229 00
Grand Ledge.....	".....	33	11.5+	523 84	23	9,757	94	131 76	25	11.7+	229 02	7	11.5+	173 57
Sparta.....	".....	50	11.5+	444 13	37	12,343	113	104 64	6	10.2+	225 00	7	8.	225 14
Saginaw.....	".....	29	9.3+	395 00	13	6,157	44	139 35	13	9.1+	207 07	5	9.2	145 60
Buchanan.....	".....	46	9.8+	376 57	22	10,230	119	85 54						
".....	".....	7	8.7+	533 12	23	2,699	23	103 43	3	7.5	196 50			
Constantine.....	".....	32	11.9+	428 51	23	10,035	36	117 26	10	11.9+	227 20	4	10.3+	180 25
Ann Arbor.....	".....	31	11.3+	423 80	23	9,366	36	101 33	5	11.5	155 65	7	8.3+	98 00
Holland.....	".....	16	10.6+	470 80	13	4,075	45	54 35	6	10.9+	210 00	2	11.7+	113 00
Pottsville.....	".....	30	10.6	395 03	7	2,443	27	50 45	6	9.8+	196 75			
".....	".....	24	11.1+	445 44	25	10,345	100	109 45	6	10.8	240 20	1	8.	125 00
Newaygo.....	".....	23	10.8+	519 33	13	4,371	55	73 05	2	9.5	245 75	2	11.3+	179 00
Hilledale.....	".....	15	10.4+	453 61	10	4,420	37	119 45						
Niles.....	".....	13	11.3+	373 54	9	3,570	23	133 21						
Allegan.....	".....	11	9.7+		8	2,434	25	69 54						

TABLE No. 20.—Showing number canvassed who support families, the number owning and number renting homes, annual earnings of renters, and the percentage of earnings paid for rent, etc., in the State outside of Grand Rapids and Detroit.

Name of Firm.	Location.	Number of families canvassed.	Number owning homes.	Percentage of families owning homes.	Number of renting homes.	Percentage of families renting homes.	Total annual earnings of renters.	Total annual family expense of renters.	Total annual rent.	Per cent of earnings paid for rent.	Per cent of family expense paid for rent.
Eaton Manufacturing Co.	Owosso.	99	75	.75+	24	.24+	\$15,288 00	\$13,951 00	\$2,088 00	.13+	.14+
Woodward Bros.	"	30	14	.46+	16	.53+	8,777 00	5,570 00	1,820 00	.19+	.21+
	"	4	3	.75	1	.25	568 00	568 00	114 00	.20+	.21+
	Northville	115	79	.68+	36	.31+	18,833 00	17,223 00	2,314 00	.14+	.16+
	"	7	4	.57+	3	.42+	2,287 00	1,987 00	338 00	.14+	.16+
	"	2	1	.50	1	.50	408 00	408 00	84 00	.17+	.17+
Adrian.	"	33	15	.46+	17	.53+	14,198 00	11,073 00	1,248 00	.08+	.11+
Charlotte.	"	25	12	.48+	13	.52+	7,272 00	5,958 00	1,016 00	.13+	.14+
"	"	21	9	.42+	12	.57+	5,432 00	4,070 00	804 00	.14+	.15+
"	"	13	8	.61+	5	.38+	1,433 00	1,029 00	343 00	.13+	.21+
Sturgis.	"	20	11	.55	9	.45	8,000 00	3,249 00	444 00	.12+	.13+
"	"	15	3	.20	12	.80	5,187 00	4,827 00	680 00	.13	.15
"	"	12	10	.83+	2	.16+	1,040 00	1,040 00	106 00	.10+	.10+
Manistee.	"	25	15	.60	10	.40	5,254 00	3,832 00	576 00	.10+	.15+
"	"	20	6	.30	14	.70	5,731 00	5,401 00	1,124 00	.19+	.20+
St. Johns.	"	33	23	.69	10	.34	8,149 00	6,060 00	1,258 80	.15+	.18+
Otsego.	"	61	30	.49+	31	.51	10,134 00	8,811 00	1,404 00	.13+	.15+
Muskegon.	"	25	12	.48	13	.52	7,776 00	6,865 00	1,014 00	.13+	.14+
"	"	16	8	.50	8	.50	5,340 00	4,860 00	684 00	.12+	.13+
Big Rapids.	"	24	8	.33+	16	.67+	8,692 00	7,251 00	1,218 00	.14+	.16+
"	"	7	4	.57+	3	.42+	1,014 00	1,000 00	168 00	.16+	.15+
Grand Ledge.	"	23	10	.43+	13	.56+	6,745 00	5,499 00	798 00	.12+	.13+
Sparta.	"	27	12	.44+	15	.55+	11,403 00	8,773 00	634 00	.06+	.07+
Saginaw.	"	13	3	.23+	10	.76+	5,720 00	5,268 00	780 00	.13+	.14+
Buchanan.	"	32	12	.37+	20	.62+	10,452 00	7,404 00	1,254 00	.11+	.16+
"	"	7	2	.28+	5	.71+	1,681 00	1,061 00	303 00	.18+	.15+
Constantine.	"	23	9	.39+	14	.61+	8,899 00	6,381 00	1,518 00	.17+	.23+
Ann Arbor.	"	22	12	.54+	10	.45+	5,763 00	5,438 00	738 00	.13+	.14+
Holland.	"	12	4	.33+	8	.66+	3,570 00	2,850 00	471 00	.12+	.16+
"	"	7	3	.42+	4	.57+	2,089 00	1,348 00	294 00	.14+	.21+
Pottersville.	"	25	17	.68	8	.32	4,347 00	4,257 00	348 00	.08+	.08+
Newaygo.	"	18	9	.50+	9	.50+	1,967 00	1,514 00	219 00	.11+	.14+
Hilledale.	"	10	3	.30	7	.70	2,717 00	3,269 00	554 00	.15+	.17+
Niles.	"	9	5	.55+	4	.44+	1,574 00	1,574 00	264 00	.16+	.16+
Allegan.	"	8	7	.87+	1	.13+	840 00	280 00	48 00	.14+	.17+
Skalla Furniture Co.											
Oliver & Co.											

LABOR AND INDUSTRIAL STATISTICS.

TABLE No. 21.—Showing by firms, outside of Grand Rapids and Detroit, the number canvassed 19 years of age and over, the nationality, conjugal relations, etc.

Name of Firm.	Location.	Number canvassed.	Number born in U. S.	Number born of American parents.	Number born in U. S. of foreign parents.	Number foreign born.	Number married.	Number single.	Number supporting others than themselves.	Number of persons so supported.	Kind of work.		Read.		Write.	
											Hand.	Machine.	Yes.	No.	Yes.	No.
Estey Manufacturing Co.	Owosso.	127	81	67	14	45	140	27	101	310	87	40	116	11	115	19
Woodward Bros.	"	45	29	12	2	16	23	12	30	61	20	15	44	1	43	2
Orkan Co.	Northville.	120	111	99	12	28	113	26	149	307	96	43	189		129	
Co.	"	9	6	5	1	3	7	2	7	23	7	2	9		9	
Ring Co.	Adrian.	50	29	26	14	20	35	24	26	109	38	21	56		59	
Charlotte Manufacturing Co.	Charlotte.	41	37	36	1	4	31	27	24	103	26	15	41		41	
Houck & Perkins.	"	31	28	26	2	3	24	8	23	65	14	17	31		31	
Aulsebrook & Sturges	"	14	13	17	1	1	13	5	13	46	12	5	18		18	
	Sturgis.	44	27	17	10	17	34	10	34	101	32	12	44		43	
	"	13	11	4	3	7	17	1	17	62	6	12	16	2	16	1
	"	17	10	7	3	7	13	5	12	60	10	7	17		17	2
	Manistee.	35	20	9	1	25	22	13	24	67	25	10	36		35	
	"	23	11	9	2	14	16	9	17	54	19	6	24		24	
St. Johns.	"	78	26	39	6	13	46	22	63	139	36	42	78		77	1
Otsego.	"	79	71	62	9	8	63	17	63	173	59	20	79		77	1
Muskegon.	"	38	14	9	7	28	23	12	25	91	24	14	37		36	2
	"	23	14	9	5	9	16	7	16	63	14	9	22		23	
Big Rapids.	"	44	28	19	9	16	24	20	27	70	20	14	43	1	43	1
Co.	"	8	5	3	2	3	7	1	7	81	8	6	8		8	
Grand Ledge.	"	32	31	26	5	1	31	11	24	60	18	14	32		31	1
Sparta.	"	50	30	28	2	1	31	19	33	85	40	10	50		50	
Saginaw.	"	29	20	12	8	9	19	16	15	29	18	10	29		29	
Buchanan.	"	46	44	41	3	2	31	15	31	88	28	20	46		46	
	"	7	5	5	3	2	7		7	19	8	4	7		7	
Constantine.	"	32	25	22	3	7	25	7	24	62	24	8	32		32	
Ann Arbor.	"	31	24	22	13	17	22	9	23	69	20	11	28	3	28	3
Holland.	"	15	4	3	1	11	12	3	12	36	13	2	15		15	
Pottsville.	"	10	6	1	4	6	7	3	7	20	5	2	10		10	
Newaygo.	"	34	33	30	3	1	26	8	28	72	19	15	34		34	
Hilledale.	"	29	16	4	13	13	13	14	13	43	23	6	29		29	
Niles.	"	15	13	11	2	2	10	5	10	27	13	2	15		15	
Allegan.	"	13	12	11	13	1	6	7	10	18	9	4	13		13	
	"	11	6	6	1	6	2	3	8	27	4	7	10	1	10	1

TABLE No. 22.—Showing by firms outside of Grand Rapids and Detroit the number canvassed between the ages of 15 and 19 years, the nationality, etc.

Name of Firm.	Location.	Number Employed.	Number born in U. S.	Number born of Amer. born parents.	Number born in U. S. of foreign parents.	Number foreign born	Average age began work	Kind of work.		Read.		Write.	
								Hand.	Machine.	%	%	%	No.
Ratsey Manufacturing Co.	Owosso	24	19	16	3	5	13.4+	20	4	22	2	93	3
Woodward Bros.	"	7	6	4	2	1	14.	6	1	7		7	
Robbins Table Co.	"	7	6	4	2	1	14.4+	8	4	7		7	
Globe Furniture Co.	Northville	13	11	11	2	2	15.3+	11	2	13		13	
Granville Wood & Son	"	1	1	1	1	1	15.		1	1		1	
	Adrian	40	36	28	15	3	14.1+	30	10	40		40	
	Charlotte	7	7	7			15.2+	1	6	7		7	
	"	8	7	3			14.6+	1	2	8		8	
	Sturgis	1	1	1			15.		1	1		1	
	"	6	6	3			11.5		2	6		6	
	Manistee	3	3	3			11.	4		3		3	
	"	3	3	3			14.3+	2	3	3		3	
	St. Johns	12	11	5	1	2	14.	5	3	10	3	10	2
	Oshtemo	13	11	4	3	6	13.3+	4	3	12		12	
	Muskegon	12	12	6	3	1	14.	6	6	13		13	
	"	12	12	9	3	6	13.3+	10	6	13		13	
	Co.	2	2	1	1	6	11.	1	1	2		2	
	Big Rapids	5	5	2	1	2	15.	1	1	5		5	
	"	3	3	2	1	1	14.3+	5	3	3		3	
	Grand Ledge	25	25	24	1	1	14.3+	20	5	25		25	
	Sparta	6	6	6	1		14.3+	4	2	6		6	
	Saginaw	13	8	3	5	5	12.3+	7	6	13		13	
	Buchanan	2	2	2			14.6+	2		2		2	
	Constantine	10	9	8	1	1	15.	7	3	10	1	10	1
	Ann Arbor	5	5	5	2	3	14.7	5	3	4		4	
	Holland	6	5	5	1	1	13.6	3	3	6		6	
	"	3	3	3	4	3	14.5	3	3	3		3	
	Pottersville	5	5	5			14.6+	2	3	5		5	
	Newaygo	4	4	4	3	1	13.4	2	2	4		4	
	Hilledale	6	6	6	3	1	14.5	6	2	6		6	

NOTE.—Firms not appearing in this Table have no employes reported of the ages named.

LABOR AND INDUSTRIAL STATISTICS.

TABLE No. 23.—Showing by firms outside of Grand Rapids and Detroit the number canvassed, 15 years of age and under, the nationality, etc.

Name of Firm.	Location.	Number employed.	Number born in U. S.	Number born of American parents.	Number born in U. S. of foreign parents.	Number foreign born.	Average age began work.	Kind of work.		Read.		Write.	
								Hand.	Machine.	Yes.	No.	Yes.	No.
Estey Manufacturing Co.	Owosso.	10	8	7	1	2	12.7	2	8	10		10	
Woodward Bros.	"	3	2	2		1	12.		1	2		2	
Robbins Table Co.	Northville.	1	1	1		1	12.		1	1		1	
Globe Furniture Co.	Northville.	2	1	1		1	14.		2	2		2	
Adrian.	Adrian.	7	5		2	2	14.1+		7	7		7	
Sturgis.	Sturgis.	3	3		3		13.3+			3		3	
Manistee.	Manistee.	3	2	2	1		11.3+		1	2		2	
Manistee.	Manistee.	6	6	4	2		12.			6		6	
St. Johns.	"	7	7	4	3		12.8+		1	7		7	
Osteo.	Osteo.	3	3	2			11.6+		2	3		3	
Muskegon.	Muskegon.	3	3		3		14.		1	2		2	
Big Rapids.	Big Rapids.	4	3		3	1	12.3+		1	1	1		1
Grand Ledge.	Grand Ledge.	7	7	6	1		10.2+			7		7	
Sparta.	Sparta.	7	7	7			12.8+			7		7	
Saginaw.	Saginaw.	5	4	1	3	1	12.			5	1	5	1
Constantine.	Constantine.	4	4	4			12.1+		1	4		4	
Ann Arbor.	Ann Arbor.	7	5		2	5	12.8+			7		7	
Holland.	Holland.	2	2		2		12.5			2		2	
Pottersville.	Pottersville.	1	1	1			14.			1		1	
Newaygo.	Newaygo.	2	1		1	1	10.5		2	1	1	1	1

Note.—Firms not appearing in this Table have no employees reported of the ages named.

TABLE No. 24.—*Reports from Firms in the State outside of Grand Rapids and Detroit.*

Names of firms.	Whole number employed May 1, 1899.	Aggregate wages paid dur- ing the year.	Wholesale value of goods manufactured during the year.
OWOSSO:			
Estey Manufacturing Co.....	226	\$25,000	\$225,000
Woodward Bros.....	61	24,246	53,478
Robbins Table Co.....	20	5,700	15,000
NORTHVILLE:			
Globe Furniture Co.....	280	70,000	225,000
Granville Wood & Son Pipe Organ Co.....	11	6,080	16,350
Ely Dowel & Manufacturing Co.....		no report.	
ADRIAN:			
Adrian Furniture Manufacturing Co.....	154	32,000	125,000
CHARLOTTE:			
Curtis & Bennett.....		no report.	
Charlotte Manufacturing Co.....	4)	14,520	38,046
Houck & Perkins.....		no report.	
STURGIS:			
Aulsbrook & Sturges.....	70	21,000	65,000
Grobhiser & Crosby Furniture Co.....	81	12,400	35,000
Wait & Barnes Furniture Co.....		no report.	
MANISTEE:			
Filertown Manufacturing Co.....	60	25,200	60,000
Manistee Manufacturing Co.....	68	12,000	40,000
ST. JOHNS:			
St. Johns Manufacturing Co.....	172	60,000	200,000
ORSEGO:			
C. D. Stuart.....	114	30,000	55,000
MUSKEGON:			
Muskegon Valley Furniture Co.....	145	46,500	145,000
Kelly Bros. Manufacturing Co.....	64	25,341	95,000
BIG RAPIDS:			
Creacent Furniture & Manufacturing Co.....	73	10,540	40,000
Big Rapids Furniture Co.....		no report.	
GRAND LEDGE:			
Grand Ledge Chair Co.....	60	18,000	35,000
SPARTA:			
Welch Folding Bed Co.....	100	25,000	90,000
SAGINAW:			
Ring-Brady Co.....	77	45,000	90,000
BUCHANAN:			
Spencer & Barnes.....		no report.	
Osborn Furniture Co.....	15	3,063	4,045
CONSTANTINE:			
Empire Furniture Co.....	46	15,000	30,000
ANN ARBOR:			
Michigan Furniture Co.....	60	19,780	55,577
HOLLAND:			
Werkman Manufacturing Co.....	70	24,800	68,000
R. & A. M. Kanters Furniture Co.....		no report.	
POTTERVILLE:			
G. N. & J. W. Potter.....	45	15,000	45,000
NEWAYGO:			
Converse Furniture Co.....		no report.	
HILLSDALE:			
A. E. Palmer.....	35	10,000	40,000
NILES:			
Skalia Furniture Co.....		no report.	
ALLEGAN:			
Oliver & Co.....	16	6,000	12,000
Total.....	2,092	\$662,160	\$1,902,494

SYNOPSIS OF FIRMS.

ESTEY MANUFACTURING CO., OWOSSO,

Manufacturers of medium grade chamber suits, chiffoniers and side boards. Total wholesale value of goods manufactured during the past fiscal year, \$225,000. Number of employes, 225. Total amount of wages paid during the past fiscal year, \$85,000. Number of employes canvassed by this bureau, 161. Nationality: Americans, 107: Germans, 38; Canadians, 10; Irishmen, 1; Englishmen, 8; Scotchmen, 1; Austrian, 1. Parentage of those born in the United States: American, 90; German, 11; Irish, 2; English, 2; Scotch, 1; Canadian, 1. Ninety-five are married, 61 single and 5 widowers. There are 207 children in the families, of which 85 attend school. Sixty of the employes support themselves only, while 101 support, other than themselves, 310 persons. Total number of months employed during the year, 1,702½, an average of 10.5+. During the year 126 men lost time amounting to 4,769 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$58,152. Of the foreigners, 9 are not naturalized; 14 had \$4,860.60 upon arrival in this country. Forty employes paid \$321.05 for working tools during the year. Total annual family expenses, \$37,868. Fourteen of the employes live at home and give their wages to their parents. Sixty-three men saved \$6,126 during the year. Eleven have money at interest, amounting to \$7,775. Seventy-five own homes, valued at \$76,500. Of those owning homes, 51 are mortgaged for \$15,890. Twenty-four rent and pay a monthly rental of \$174, an average of \$7.25. Seventy-four families own sewing machines; 19 persons have organs and 2 pianos. One hundred and twelve take newspapers and magazines: 36 dailies, 136 weeklies and 11 magazines. Forty board and pay \$119.25 per week, an average of \$2.98. Thirty-one carry a total life insurance of \$57,500. Thirteen belong to benefit societies, representing a weekly sick benefit of \$123, an average of \$9.46. One hundred and fifty-seven had good health when they began work, 1 fair and 3 poor. Present state of health: 127 good, 30 fair and 4 poor. Thirteen cannot read and 14 cannot write. One workman is subject to loss of wages by error, waste or breakage. Twenty-seven are required to exercise more than ordinary care to prevent accident. Forty-one reported wages decreased during the past 5 years, 51 increased, 52 the same, 15 are boys under 16 years of age and 2 have been in this country less than one year. One hundred and twenty-eight pay cash when they purchase goods, 6 cash and credit, 17 buy on credit and 10 did not answer. Fifteen keep an itemized account of their expenses. One hundred and twenty-one are as well off as they were 5 years ago, 21 are not, 2 did not answer, 15 are boys under 16 years of age and 2 have been in this country less than 1 year.

WOODWARD BROS., OWOSSO,

Manufacturers of medium chamber suits, side-boards, center tables and chiffoniers. Total wholesale value of goods manufactured during the past fiscal year, \$53,476. Number of employes 61. Total amount of wages paid during the past fiscal year, \$24,246. Number of employes canvassed by this bureau, 55. Nationality: Americans, 37; Germans, 9; Canadians, 7; Englishman, 1; Austrians, 1. Parentage of those born in the United States: American 34; English, 1; German 1; Irish, 1. Thirty are married, 22 single, and three are widowers. There are 46 children in the families, of which 21 attend school. Twenty-five of the employes support themselves only, while 30 support, other than themselves, 81 persons. Total number of months employed during the year, 578½, an average of 10.5+. During the year 43 men lost time amounting to 1,674 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$20,058. Of the foreigners 8 had \$570 upon arrival in this country, and 1 has sent \$150 to relatives in the old country. Eleven employes paid \$186 for working tools during the year. Total annual family expenses, \$9,692. One of the employes lives at home and gives his wages to his parents. Twenty-six men saved \$2,949 during the year. Four have money at interest, amounting to \$301. Fourteen own homes valued at \$15,350. Of those owning houses, 7 are mortgaged for \$3,192. Sixteen rent and pay a monthly rental of \$110, an average of \$6.87. Twenty-four families own sewing machines; 4 persons own organs, and 1 a melodeon. Thirty-five men take newspapers and magazines: 21 dailies, 51 weeklies and 8 monthlies. Twenty-three board and pay \$68.35, per week, an average of \$397. Six carry a total life insurance of \$7,275; 1 belongs to a benefit society, representing a weekly sick benefit of \$20. Fifty-four had good health when they began work, and 1 fair. Present state of health: 46 good, 5 fair and 4 poor. One cannot read and two cannot write. None are subject to loss of wages on account of error, waste or breakage. Two are required to exercise more than ordinary care to prevent accidents. Six reported a decrease of wages during the past 5 years, 19 an increase, 23 the same, 5 are boys under 16 years of age, and 2 have been in this country less than 1 year. Forty-eight pay cash when they purchase goods, 2 cash and credit, and 5 did not answer. Eight keep an itemized account of their expenses. Forty-three are as well off as they were 5 years ago, 5 are not, 5 are boys under 16 years of age, and two have been in this country less than one year.

ROBBINS TABLE CO., OWOSSO,

Manufacturers of extension tables. Total wholesale value of goods manufactured during the past fiscal year, \$15,000. Number of employes, 20. Total amount of wages paid during the past fiscal year, \$5,700. Number of employes canvassed by this bureau, 16. Nationality: Americans, 13; Englishmen, 1; Germans, 1; Canadians, 1. Parentage of those born in the United States: Americans, 11; Irish, 1; German, 1. Two are married, 13 single and 1 a widower. There are 6 children in the families, of which 3 attend school. Twelve of the employes support themselves only, while 4 support, other than themselves, 12 persons. Total number of months employed during the year, 162, an average

of 10.1+. During the year 14 men lost time amounting to 779 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$4,781. Two of the employees spent \$6.50 for working tools during the year. Total annual family expenses, \$1,750. Two live at home and give their wages to their parents. Two men saved \$225 during the year. Three men own homes valued at \$4,500. Of those owning homes 2 are mortgaged for \$750. One rents and pays a monthly rental of \$9.50. Four of the families own sewing machines, and 8 persons have organs. Twelve take newspapers and magazines: 9 dailies, 15 weeklies and 2 magazines. Ten pay \$26.50 per week board, an average of \$2.65. All had good health when they began work. Present state of health: 13 good and 3 fair. None are subject to loss of wages by error, waste or breakage. One is required to exercise more than ordinary care to prevent accidents. Two reported a decrease of wages during the past 5 years, 7 an increase, 5 the same, and 2 are boys under 16 years of age. All pay cash when they purchase goods. None keep an itemized account of their expenses. All are as well off as they were five years ago.

GLOBE FURNITURE CO., NORTHVILLE,

Manufacturers of church and school furniture. Total wholesale value of goods manufactured during the past fiscal year, \$225,000. Number of employees, 260. Total amount of wages paid during the past fiscal year, \$70,000. Number of employees canvassed by this bureau, 154. Nationality: Americans, 123; Canadians, 21; Englishmen, 8; Scotchmen, 1; Irishmen, 1. Parentage of those born in the United States: American, 112; English, 6; German, 2; Irish, 3. One hundred and eleven are married, 41 single and 2 are widowers. There are 184 children in the families, of which 102 attend school. Thirty-three of the employees support themselves only, while 121 support, other than themselves, 309 persons. Total number of months employed during the year, 1,771, an average of 11.5. During the year 87 men lost time amounting to 1,846 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$71,025. Of the foreigners, 7 are not naturalized, 18 had \$3,115 upon arrival in this country, and 1 has sent \$5 to relatives in the old country. Thirty-six employees paid \$291 for working tools during the year. Total annual family expenses, \$48,053. One employee lives at home and gives his wages to his parents. Eighty-six men saved \$10,403 during the year. Twenty-three have money at interest, amounting to \$10,975. Seventy-nine own homes valued at \$98,925. Of those owning homes, 52 are mortgaged for \$26,265. Thirty-six rent and pay a monthly rental of \$234.50, an average of \$6.51. One hundred and seven families own sewing machines: 46 persons have organs, 3 pianos, and 1 a melodeon. One hundred and twenty-six take newspapers and magazines: 75 dailies, 221 weeklies and 42 magazines. Twenty-five board and pay \$79.50 per week, an average of \$3.18. Forty-one carry a total life insurance of \$69,000. One hundred and ten belong to benefit societies, representing a weekly sick benefit of \$722, an average of \$6.56. All had good health when they began work. Present state of health: 127 good, 16 fair and 11 poor. All can read and write. Twelve are subject to loss of wages by error, waste or breakage. Forty-nine are required to exercise more than ordinary care to prevent accidents. Eight reported a decrease of wages during the past 5 years, 68

an increase, 54 the same and 20 did not answer. Seventy-six pay cash when they purchase goods, 69 buy on credit and 9 did not answer. Fifteen keep an itemized account of their expenses. Forty are as well off as they were 5 years ago, 13 are not, 81 are better, 16 did not answer and four have been in this country less than 1 year.

GRANVILLE WOOD & SON, PIPE ORGAN FACTORY, NORTHVILLE,

Manufacturers of pipe organs. Total wholesale value of goods manufactured during the past fiscal year, \$16,350. Number of employes, 11. Total amount of wages paid during the past fiscal year, \$6,080. Number of employes canvassed by this bureau, 10. Nationality : Americans, 7; Englishmen, 1; Swiss, 1; Canadians, 1. Parentage of those born in the United States: American, 5; German, 2. Six are married, 3 single and 1 a widower. There are 16 children in the families, of which 10 attend school. Two employes support themselves only, while 8 support, other than themselves, 24 persons. Total number of months employed during the year, 110½, an average of 11.0+. During the year eight men lost time amounting to 247 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$5,955. Of the foreigners 1 is not naturalized, 2 had \$180 upon arrival in this country, and two have sent \$400 to relatives in the old country. Seven employes paid \$89 for working tools during the year. Total annual family expenses, \$4,267. Four men saved \$450 during the year. One has \$200 at interest. Four own homes valued at \$6,200. Of those owning homes two are mortgaged for \$875. Three rent and pay a monthly rental of \$28, an average of \$9.33. Four families own sewing machines; four persons have organs, and 2 pianos. Nine take newspapers : 7 dailies, 18 weeklies and 2 monthlies. Three board and pay \$9.75 per week, an average of \$3.25. Four carry a total life insurance of \$6,000. Two belong to benefit societies, representing a weekly sick benefit of \$10, an average of \$5. All had good health when they began work, and all have good health at the present time. All can read and write. None are subject to loss of wages by error, waste or breakage. One is required to exercise more than ordinary care to prevent accidents. Four reported an increase of wages during the past five years, 6 the same. Six pay cash when they purchase goods, and 4 buy on credit. Two keep an itemized account of their expenses. Five are as well off as they were five years ago, and five are better off.

ELY DOWEL AND MANUFACTURING CO., NORTHVILLE,

Manufacturers of dowel pins, beading, card tables and rustic chairs. This firm had just moved to Northville and had no report to make. Number of men canvassed by this bureau, 7. Nationality : Americans, 6; Canadians, 1. Parentage of those born in the United States : All American. Two are married, 4 single and 1 a widower. There are 6 children in the families, of which 2 attend school. Four of the employes support themselves only, while 3 support, other than themselves, 5 persons. Total number of months employed during the year, 78½, an average of 10.5+. All work 10 hours,

are paid weekly and in cash. Total annual earnings, \$2,668. One of the foreigners had \$7 upon arrival in this country. One man paid \$10 for working tools during the year. Total annual family expenses, \$979. One man saved \$100 during the year, and 1 has \$50 at interest. One owns a home valued at \$2,000, which is mortgaged for \$700. One rents and pays a monthly rental of \$7. Two of the families own sewing machines. None own musical instruments. Three take newspapers, 2 dailies and 5 weeklies. Four board and pay \$15 per week, an average of \$3.75. One carries a life insurance of \$1,000. One belongs to a benefit society, representing a weekly sick benefit of \$3. All had good health when they began work and all have good health now. All can read and write. None are subject to loss of wages by error, waste or breakage. Three are required to exercise more than ordinary care to prevent accidents. One reports an increase of wages during the past five years. Six pay cash when they purchase goods, and one did not answer. Two are better off than they were five years ago; 1 is not, and 8 did not answer.

ADRIAN FURNITURE MANUFACTURING CO., ADRIAN,

Manufacturers of bedroom suits. Total wholesale value of goods manufactured during the past fiscal year, \$125,000. Number of employees, 154. Total amount of wages paid during the past fiscal year, \$32,000. Number of employees canvassed by this bureau, 106. Nationality: Americans, 82; Germans, 20; Englishmen, 1; Belgians, 1; Canadians, 1; Irishmen, 1. Parentage of those born in the United States: American, 48; German, 19; Irish, 10; English, 8; Belgian, 1; Scotch, 1. Thirty-five are married, and 71 single. There are 81 children in the families, of which 26 attend school. Seventy of the employees support themselves only, while 36 support, other than themselves, 109 persons. Total number of months employed during the year, 1,169½, an average of 11.0+. During the year 76 men lost time amounting to 2,840 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$41,923. Of the foreigners, 2 are not naturalized; 14 had \$1,057.75 upon arrival in this country, and 3 have sent \$225 to relatives in the old country. Fourteen employees paid \$72 for working tools during the year. Total annual family expense, \$16,601. Twenty-seven men have saved \$3,145 during the year. Eight have money at interest amounting to \$4,850. Fifteen own homes valued at \$20,200. None are mortgaged. Seventeen rent and pay a monthly rental of \$104, an average of \$6.11. Thirty-three families own sewing machines; 5 persons have organs, 6 pianos, 1 a cornet, 1 a violin, and 1 a guitar. Ninety-seven take newspapers and magazines: 39 dailies, 93 weeklies, and 23 monthlies. Sixty-eight board and pay \$229.50, an average of \$3.37. Nine carry a total life insurance of \$15,400. Nineteen belong to benefit societies, representing a weekly sick benefit of \$84.50, an average of \$4.44 per week. One hundred and five had good health when they began work, and one fair. Present state of health: 105 good and 1 poor. All can read and write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents. Ninety reported an increase of wages during the past five years, 15 are boys under 16 years of age, and 1 has been in this country less than one year. Ninety-four pay cash when they purchase goods, 3 cash and credit, and 9 buy on credit. All are as well off as they were 5 years ago.

CURTIS & BENNETT, CHARLOTTE.

No report was received from this firm. Number of employes canvassed by this bureau, 49. Nationality: Americans, 44; Germans, 2; Scotchmen, 1; Hollanders, 1. Parentage of those born in the United States: American, 43; English, 1. Thirty-one are married, 14 single and 3 widower. There are 79 children in the families, of which 43 attend school. Thirteen employes support themselves only, while 35 support, other than themselves, 104 persons. Total number of months employed during the year, 525, an average of 10.9+. During the year 82 men lost time amounting to 1,826 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$19,015. Of the foreigners, 2 had \$125 upon arrival in this country. Twenty-two of the employes paid \$221.50 for working tools during the year. Total family expenses, \$12,164. Two of the employes live at home and give their wages to their parents. Twelve men saved \$1,389 during the year. Two have money at interest, amounting to \$350. Twelve own their own homes, valued at \$12,800. Of those owning homes, 4 are mortgaged for \$1,100. Sixteen rent and pay a monthly rental of \$84.67, an average of \$5.29. Twenty-four families own sewing machines; 4 persons have organs, 3 violins, 2 melodeons and 1 a snare drum. Forty take newspapers and magazines: 14 dailies, 69 weeklies and 12 monthlies. Fourteen board and pay \$40.25 per week, an average of \$2.87. Eight carry a total life insurance of \$10,850. Eight belong to benefit societies, representing a weekly sick benefit of \$28, an average of \$3.50. Forty-four had good health when they began work and 4 fair. Present state of health: 35 good, 11 fair and 2 poor. None are subject to loss of wages by error, waste or breakage. Ten are required to exercise more than ordinary care to prevent accidents. Twelve reported a decrease of wages during the past 5 years, 10 an increase, 25 the same, and 1 is a boy under 16 years of age. All pay cash when they purchase goods. Three keep an itemized account of their expenses. Thirty-six are as well off as they were 5 years ago, 11 are not and 1 is a boy under 16 years of age.

CHARLOTTE MANUFACTURING CO., CHARLOTTE,

Manufacturers of extension tables and bedroom suits. Total wholesale value of goods manufactured during the past fiscal year, \$38,046. Number of employes, 40. Total amount of wages paid during the past fiscal year, \$14,520. Number of men canvassed by this bureau, 84. Nationality: Americans, 31; Germans, 1; Englishmen, 1; Central Americans, 1. Parentage of those born in the United States: American, 29; German, 2. Twenty-two are married, 11 single, and 1 a widower. There are 35 children in the families, of which 11 attend school. Eleven of the employes support themselves only, while 29 support, other than themselves, 55 persons. Total number of months employed during the year, 366½, an average of 10.7+. During the year 24 men lost time amounting to 1,080 days. All work 10 hours a day, are paid weekly and in cash. Total annual earnings, \$18,080. Seven employes paid \$63 for working tools during the year. Total annual family expenses, \$7,761. Twelve men saved \$1,644 during the year. Two men have \$3,200 at interest. Nine own homes valued at \$7,900. Of those owning homes 4 are mortgaged for \$615. Twelve rent and pay a monthly rental of \$67, an

average of \$5.58. Sixteen families own sewing machines; 5 persons have organs, 3 melodeons, and 1 a banjo. Seventeen take newspapers and magazines: 10 dailies, 21 weeklies and 5 monthlies. Twelve board and pay \$35 per week, an average of \$2.91. Seven carry a total life insurance of \$12,700. Three belong to benefit societies, representing a weekly sick benefit of \$9, an average of \$3. Twenty-nine had good health when they began work and 5 fair. Present state of health: 17 good, 13 fair and 4 poor. All can read and write. None are subject to loss of wages by error, waste or breakage. Two are required to exercise more than ordinary care to prevent accidents. One reported a decrease of wages during the past 5 years, 15 an increase, 3 did not answer, 1 is a boy under 16 years of age, and 14 report the same. All pay cash when they purchase goods. Four keep an itemized account of their expenses. Twenty-eight are as well off as they were 5 years ago, 4 are not, 1 did not answer, and 1 is a boy under 16 years of age.

HOUCK & PERKINS, CHARLOTTE.

No report from firm. Number of men canvassed by this bureau, 19. Nationality: All Americans. Parentage of those born in the United States: American, 18; Irish, 1. Thirteen are married and 6 single. There are 36 children in the families, of which 15 attend school. Six of the employees support themselves only, while 13 support, other than themselves, 46 persons. Total number of months employed during the year, 212, an average of 11.1+. During the year 11 men lost time amounting to 314 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$7,812. Five of the employees paid \$85 for working tools during the year. Total annual family expenses, \$4,168. Four men saved \$550 during the year. Eight own homes valued at \$10,900. Of those owning homes 4 are mortgaged for \$1,100. Five rent and pay a monthly rental of \$29, an average of \$5.80. Eleven families own sewing machines, 6 persons have organs, 1 a banjo, and 1 a horn. Thirteen take newspapers and magazines: 8 dailies, 20 weeklies, and 5 monthlies. Three board and pay \$7 per week, an average of \$2.33. None carry a life insurance. One belongs to a benefit society, representing a weekly sick benefit of \$3. Eighteen had good health when they began work and 1 fair. Present state of health: 14 good and 5 fair. All can read and write. None are subject to loss of wages by error, waste or breakage. Two are required to exercise more than ordinary care to prevent accidents. Six reported a decrease of wages during the past five years, 11 the same, 2 did answer. All pay cash when they purchase goods. Two keep an itemized account of their expenses. Fourteen are as well off as they were 5 years ago, 3 are not, 2 did not answer.

AULSBROOK & STURGES, STURGIS,

Manufacturers of cheap and medium grade of chamber suits and sideboards. Total wholesale value of goods manufactured during the past fiscal year, \$65,000. Number of employees, 70. Total amount of wages paid during the past fiscal year, \$31,000. Number of employees canvassed by this bureau, 53. Nationality: Americans, 36; Ger-

mans, 15; Englishmen, 1; Canadians, 1. Parentage of those born in the United States: American, 20; German, 14; England, 1; Canada, 1. Thirty-four are married and 19 single. There are 95 children in the families, of which 82 attend school. Eighteen employees support themselves only, while 85 support, other than themselves, 103 persons. Total number of months employed during the year, 591½, an average of 11.1+. During the year 48 men lost time amounting to 1,163 days. All work 10 hours a day, are paid semi-monthly and in cash. Total annual earnings, \$23,666. Of the foreigners, 6 had \$310 upon arrival in this country, and 2 have sent \$160 to relatives in the old country. Eleven employees paid \$102 for working tools during the year. Total annual family expenses, \$13,076. Seven of the employees live at home and give their wages to their parents. Twenty-seven men saved \$2,615 during the year. Ten have money at interest amounting to \$5,425. Twenty-four own homes valued at \$17,045. Eight of those owning homes are mortgaged for \$1,955. Nine rent and pay a monthly rental of \$37, an average of \$4.11. Twenty-five families own sewing machines, 3 persons have organs, 1 a melodeon, and 1 a piano and violin. Forty-one take newspapers and magazines: 20 dailies, 50 weeklies and 3 magazines. Eleven men board and pay \$31.50 per week, an average of \$2.86. Three carry a total life insurance of \$2,450. Four belong to benefit societies representing a weekly sick benefit of \$7, an average of \$1.75. Fifty-two had good health when they began work, and 1 poor. Present state of health: Forty-one good, 7 fair and 5 poor. One cannot write. One is subject to loss of wages by error, waste or breakage. Twelve are required to exercise more than ordinary care to prevent accidents. Sixteen reported a decrease of wages during the past 5 years, 21 an increase, 13 the same, 4 are boys under 16 years of age. Thirty-four pay cash when they purchase goods, 16 buy on credit, and 3 did not answer. Nine keep an itemized account of their expenses. Twenty-three are as well off as they were 5 years ago, 6 are not, 18 better, 2 did not answer, and 4 are boys under 16 years of age.

GROBHISER & CROSBY FURNITURE CO., STURGIS,

Manufacturers of tables of all kinds and folding beds. Total wholesale value of goods manufactured during the past fiscal year, \$35,000. Number of employees, 31. Total amount paid for wages during the past fiscal year, \$12,400. Number of employees canvassed by this bureau, 28. Nationality: Americans, 16; Germans, 6; Canadians, 1. Parentage of those born in the United States: American, 10; German, 4; Canadian, 1; Swiss, 1. Seventeen are married and 6 single. There are 51 children in the families, of which 22 attend school. Five of the employees support themselves only, while 18 support, other than themselves, 63 persons. Total number of months employed during the year, 238½, an average of 10.1+. During the year 18 men lost time, amounting to 1,111 days. Total annual earnings, \$3,848. All work 10 hours, are paid weekly and in cash. Of the foreigners 1 is not naturalized; 2 had \$265 upon arrival in this country. Six employees paid \$34.15 for working tools during the year. Total annual family expenses, \$6,101. Two of the employees live at home and give their wages to their parents. Four men saved \$67 during the year. None have money at interest. Three own homes valued at \$1,525. Of those owning homes two are mortgaged for \$700. Twelve rent and pay a monthly rental of \$57.50, an average of \$4.79. Twelve families

own sewing machines; and 1 person has a violin. Twelve take newspapers and magazines: 5 dailies, 15 weeklies and 3 magazines. Three board and pay \$10.50 per week, an average of \$3.50. Three carry a total life insurance of \$2,580. One belongs to a benefit society representing a weekly sick benefit of \$3. Twenty-two had good health when they began work, and 1 poor. Present state of health: 15 good, 2 fair and 6 poor. Two cannot read or write. One is subject to loss of wages by error, waste or breakage. Ten are required to exercise more than ordinary care to prevent accidents. Eleven reported a decrease of wages during the past five years, 3 an increase, 6 the same, and 3 are boys under 16 years of age. Twelve pay cash when they purchase goods, 8 buy on credit and 3 did not answer. Three keep an itemized account of their expenses. Eight are as well off as they were five years ago, 9 are not, 3 are better and 3 are boys under 16 years of age.

THE WAIT & BARNES FURNITURE CO., STURGIS.

No report received from this firm. Number of employes canvassed by this bureau, 20. Nationality: Americans, 13; Germans, 5; Hollanders, 1; Frenchmen, 1. Parentage of those born in the United States: American, 9; German, 8; Irish, 1. Twelve are married and eight are single. There are 44 children in the families, of which 24 attend school. Six employes support themselves only, while 14 support, other than themselves 54 persons. Total number of months employed during the year, 220½, an average of 11.0+. During the year 12 men lost time amounting to 507 days. All work 10 hours and are paid weekly and in cash. Total annual earnings, \$8,561. Of the foreigners, 4 had \$429 upon arrival in this country, and 1 has sent \$15 to relatives in the old country. Six employes paid \$65 for working tools during the year. Total annual family expenses, \$4,668. Two of the employes live at home and give their wages to their parents. Three men saved \$355 during the year. Ten own homes, valued at \$6,300. Of those owning homes, 5 are mortgaged for \$1,500. Two rent and pay a monthly rental of \$9, an average of \$4.50. Ten families own sewing machines; 1 person has an organ and 1 a melodeon. Eighteen men take newspapers: 5 dailies, 21 weeklies, 7 magazines. Five board and pay \$23 per week, an average of \$4.60. One carries a life insurance of \$600. Three belong to benefit societies, representing a weekly sick benefit of \$24.50, an average of \$8.16. All had good health when they began work. Present state of health: 14 good, 5 fair and 1 poor. All can read and write. One is subject to loss of wages by error, waste or breakage. Five are required to exercise more than ordinary care to prevent accidents. Six reported a decrease of wages during the past 5 years, 8 an increase, 5 the same and 1 is a boy under 16 years of age. Fifteen pay cash when they purchase goods, 1 cash and credit, 3 buy on credit and 1 did not answer. Three keep an itemized account of their expenses. Fifteen are as well off as they were 5 years ago, 3 are not, 1 did not answer and 1 is a boy under 16 years of age.

FILERTOWN MANUFACTURING CO., MANISTEE,

Manufacturers of all kinds of furniture. Total wholesale value of goods manufactured during the past fiscal year, \$60,000. Number of employes, 60. Total amount

paid for wages during the past fiscal year, \$25,200. Number of employes canvassed by this bureau, 49. Nationality : Americans, 22 ; Germans, 10 ; Polanders, 4 ; Swedes, 4 ; Danes, 3 ; Norwegians, 2 ; Canadians, 2 ; Italians, 1 ; Hollanders, 1. Parentage of those born in the United States : American, 18 ; German, 2 ; Canadian, 1 ; Irish, 1. Twenty-two are married and 27 single. There are 48 children in the families, of which 12 attend school. Twenty-four of the employes support themselves only, while 25 support, other than themselves, 68 persons. Total number of months employed during the year, 488½, an average of 9.9+. During the year 82 men lost time amounting to 1,708 days. All work 10 hours, are paid monthly and in cash. Total annual earnings, \$18,952. Of the foreigners 5 are not naturalized ; 12 had \$2,065 upon arrival in this country, and 8 have sent \$415 to relatives in the old country. Fifteen employes paid \$153 for working tools during the year. Total annual family expenses, \$8,851. Eight of the employes live at home and give their wages to their parents. Eight men saved \$1,659. Four have money at interest, amounting to \$1,200. Fifteen own homes valued at \$10,050. Of those owning homes 2 are mortgaged for \$1,000. Ten rent and pay a monthly rental of \$48, an average of \$4.80. Ten families own sewing machines ; none have musical instruments. Twenty-one take newspapers and magazines : 11 dailies, 26 weeklies, and 2 monthlies. Seventeen board and pay \$57.25 per week, an average of \$3.36. One has a life insurance of \$1,000. Four belong to benefit societies, representing a weekly sick benefit of \$20, an average of \$5. Forty-eight had good health when they began work, and 1 poor. Present state of health : 45 good, 1 fair, and 3 poor. All can read and write. One is subject to loss of wages by error, waste or breakage. Fourteen are required to exercise more than ordinary care to prevent accidents. Twelve reported a decrease of wages during the past 5 years, 20 an increase, 7 the same, 3 did not answer, and 7 are boys under 16 years of age. Thirty-three pay cash when they purchase goods, and 16 did not answer. Six keep an itemized account of their expenses. Thirty-one are better off than they were 5 years ago, 9 are not, 2 did not answer, and 7 are boys under 16 years of age.

MANISTEE MANUFACTURING CO., MANISTEE,

Manufacturers of common and medium suites and beds. Total wholesale value of goods manufactured during the past fiscal year, \$40,000. Number of employes, 68. Total amount of wages paid during the past fiscal year, \$12,000. Number of employes canvassed by this bureau, 44. Nationality : Americans, 28 ; Swedes, 7 ; Norwegians, 4 ; Danes, 4 ; Germans, 2 ; Canadians, 2 ; Hollanders, 1 ; Scotchmen, 1. Parentage of those born in the United States : American, 17 ; English, 4 ; Danish, 1 ; German, 1. Sixteen are married and 28 are single. There are 35 children in the families, of which 21 attend school. Twenty-seven of the employes support themselves only, while 17 support, other than themselves, 54 persons. Total number of months employed during the year, 472½, an average of 10.7+. During the year 35 men lost time amounting to 1,337 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$16,340. Of the foreigners 5 are not naturalized ; 6 had \$187.50 upon arrival in this country, and 4 have sent \$254.90 to relatives in the old country. Ten employes paid \$71 for working tools during the year. Total annual family expenses, \$7,962. Eleven of the employes live at home and give their wages to their parents. Five men

saved \$615 during the year. Three have money at interest, amounting to \$150. Six own homes valued at \$8,700. Of those owning homes 2 are mortgaged for \$350. Fourteen rent and pay \$93.67, an average of \$6.69. Twelve of the families own sewing machines, and 1 person has a violin. Seventeen take newspapers: 8 dailies and 25 weeklies. Sixteen board and pay \$52.25 per week, an average of \$3.26. Three men carry a total life insurance of \$4,200. One belongs to a benefit society and in case of sickness receives \$5 per week. Forty one had good health when they began work, 1 fair and 2 poor. Present state of health: 40 good, 1 fair and 8 poor. Three cannot read or write. None are subject to loss of wages by error, waste or breakage. Fifteen are required to exercise more than ordinary care to prevent accidents. Twelve reported a decrease of wages during the past five years, 12 an increase, 8 the same, 8 did not answer, 10 are boys under 16 years of age, and 4 have been in this country less than 1 year. Thirty-nine pay cash when they purchase goods, and five did not answer. Four keep an itemized account of their expenses. Twenty are as well off as they were 5 years ago, 4 are not, 6 did not answer, 10 are boys under 16 years of age, and 4 have been in this country less than 1 year.

ST. JOHNS MANUFACTURING CO., ST. JOHNS,

Manufacturers of extension, breakfast and restaurant tables. Total wholesale value of goods manufactured during the past fiscal year, \$200,000. Number of employees, 172. Total amount of wages paid during the past fiscal year, \$60,000. Number canvassed by this bureau, 93. Nationality: Americans, 79; Englishmen, 6; Canadians, 5; Swiss, 1; Germans, 1; Irishmen, 1. Parentage of those born in the United States: American, 67; Irish, 6; English, 2; Canadian, 1; Swiss, 1; German, 2. Forty-four are married, 47 single, and 2 widowers. There are 100 children in the families, of which 43 attend school. Forty-two of the employees support themselves only, while 51 support, other than themselves, 142 persons. Total number of months employed during the year, 1,008½, an average of 10.7+. During the year 64 men lost time amounting to 2,619 days. All work 10 hours, are paid monthly and in cash. Total annual earnings, \$35,966. Of the foreigners 3 are not naturalized; 7 had \$1,313 upon arrival in this country, and 2 have sent \$130 to relatives in the old country. Eleven of the employees paid \$111.75 for working tools during the year. Total annual family expenses, \$15,852. Four of the employees live at home and give their wages to their parents. Forty-four men saved \$5,315 during the year. Eleven have money at interest, amounting to \$3,940. Thirty-three own homes valued at \$27,505. Of those owning homes, 28 are mortgaged for \$12,494. Seventeen rent and pay a monthly rental of \$104.90, an average of \$6.17. Thirty-three families own sewing machines; 10 persons have organs, 4 violins, 2 guitars, 2 cornets, 1 an accordion, 1 a clarinet, and 1 a banjo. Fifty-one take newspapers and magazines: 26 dailies, 58 weeklies, and 8 magazines. Thirty-four board and pay \$92.25 per week, an average of \$2.71. Sixteen carry a total life insurance of \$24,200. Fifty-six belong to benefit societies, representing a weekly sick benefit of \$217.24, an average of \$3.87. Eighty-nine had good health when they began work, 2 fair, and 2 poor. Present state of health: 74 good, 13 fair, and 6 poor. One cannot write. None are subject to loss of wages by error, waste or breakage. None are required to exercise

more than ordinary care to prevent accidents. Seven reported a decrease of wages during the past 5 years, 42 an increase, 13 the same, 25 did not answer, 5 are boys under 16 years of age, and 1 has been in this country less than 1 year. Sixty pay cash when they purchase goods, 11 cash and credit, 20 buy on credit, and 2 did not answer. Twenty-four keep an itemized account of their expenses. Seventy-seven are as well off as they were 5 years ago, 7 are not, 1 is better, 2 did not reply, 5 are boys under 16 years of age, and 1 has been in this country less than 1 year.

C. D. STUART, OTSEGO,

Manufacturer of chairs. Total wholesale value of goods manufactured during the past fiscal year, \$55,000. Number of employes, 114. Total amount paid for wages during the past fiscal year, \$80,000. Number of employes canvassed by this bureau, 93. Nationality: Americans, 85; Germans, 5; Englishmen, 1; Canadians, 1; Scotchmen, 1. Parentage of those born in the United States: American, 73; English, 8; Irish, 2; German, 4; Holland, 1; Canadian, 1; Scotch, 1. Fifty-six are married, 31 single, and 6 widowers. There are 110 children in the families, of which 61 attend school. Twenty-five of the employes support themselves only, while 68 support, other than themselves, 179 persons. Total number of months employed during the year, 1,020½, an average of 10.9½. During the year 79 men lost time amounting to 2,470 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$34,115. Of the foreigners 1 is not naturalized; 3 had \$292 upon arrival in this country, and 2 have sent \$230 to relatives in the old country. Eighteen employes paid \$164.50 for working tools during the year. Total annual family expenses, \$20,786. One of the employes lives at home and gives his wages to his parents. Thirty-nine men saved \$3,525 during the year. Thirteen have money at interest, amounting to \$5,745. Thirty-nine own homes valued at \$25,490. Of those owning homes 10 are mortgaged for \$2,734. Twenty-two rent and pay a monthly rental of \$117, an average of \$5.31. Forty-five families own sewing machines; 13 persons have organs, 5 violins, 2 guitars, 1 an accordion, 1 a banjo, 1 a cornet and violin, 1 a cornet and trombone, 1 an organ and violin, and 1 a melodeon. Sixty-seven take newspapers and magazines: 19 dailies, 80 weeklies, 26 monthlies. Twenty-eight board and pay \$77 a week, an average of \$2.75. Six carry a total life insurance of \$8,000. None belong to benefit societies. Eighty-five had good health when they began work, 4 fair, and 4 poor. Present state of health: 54 good, 26 fair, and 13 poor. Two cannot write. None are subject to loss of wages by error, waste or breakage. Six are required to exercise more than ordinary care to prevent accidents. Twelve reported a decrease of wages during the past five years, 53 an increase, 24 the same, and 4 are boys under 16 years of age. Sixty pay cash when they purchase goods, 18 cash and credit, and 15 buy on credit. Nineteen keep an itemized account of their expenses. Sixty are as well off as they were 5 years ago, 19 are not, 10 better, and 4 are boys under 16 years of age.

MUSKEGON VALLEY FURNITURE CO., MUSKEGON,

Manufacturers of medium grade bedroom suits, sideboards and chiffoniers. Total wholesale value of goods manufactured during the past fiscal year, \$145,000. Number of em-

ployes, 145. Total amount of wages paid during the past fiscal year, \$46,500. Number of employes canvassed by this bureau, 58. Nationality: Americans, 21; Hollanders, 19; Danes, 4; Canadians, 4; Swedes, 4; Germans, 2; Irishmen, 2; Englishmen, 1; Polanders, 1. Parentage of those born in the United States: American, 2; Holland, 9; German, 6; Scotch, 1; Irish, 3. Twenty-five are married, 32 single, and 1 a widower. There are 66 children in the families, of which 23 attend school. Twenty-eight of the employes support themselves only, while 30 support, other than themselves, 97 persons. Total number of months employed during the year 641, an average of 11.0+. During the year 21 men lost time amounting to 1,040 days. All work 10 hours, are paid semi-monthly, and in cash. Total annual earnings, \$25,462. Of the foreigners, 8 are not naturalized, 9 had \$474 upon arrival in this country, and 1 has sent \$10 to relatives in the old country. Seventeen employes paid \$149 for working tools during the year. Total annual family expenses, \$18,158. Nineteen of the employes live at home and give their wages to their parents. Six men saved \$604 during the year. One man has \$50 at interest. Twelve own homes valued at \$9,900. Of those owning homes 3 are mortgaged for \$1,275. Thirteen rent and pay a monthly rental of \$84.50, an average of \$6.50. Seventeen families own sewing machines, 2 persons have organs, 1 a cornet and 1 a banjo. Thirty-four take newspapers and magazines: 20 dailies, 27 weeklies and 7 monthlies. Fifteen board and pay \$65 per week, an average of \$4.38. Five carry a total life insurance of \$8,250. Ten belong to benefit societies, representing a weekly sick benefit of \$53.50, an average of \$5.35. Fifty-three had good health when they began work, 1 fair, and 1 did not answer. Present state of health: 38 good, 16 fair, and 1 did not answer. Two cannot read, and 3 cannot write. Two are subject to loss of wages by error, waste or breakage. Nine are required to exercise more than ordinary care to prevent accidents. Three reported a decrease of wages during the past 5 years, 11 an increase, 21 the same, 13 did not answer, 9 are boys under 16 years of age, and 1 has been in this country less than 1 year. Twenty-one pay cash when they purchase goods, 1 cash and credit, 4 buy on credit, and 32 did not answer. Two keep an itemized account of their expenses. Twenty-five are as well off as they were 5 years ago, 4 are not, 4 are better, 15 did not answer, 9 are boys under 16 years of age, and 1 has been in this country less than 1 year.

KELLEY BROS. MANUFACTURING CO., MUSKEGON,

Manufacturers of refrigerators and special furniture. Total wholesale value of goods manufactured during the past fiscal year, \$95,000. Number of employes, 64. Total amount of wages paid during the past fiscal year, \$25,341. Number of employes canvassed by this bureau, 29. Nationality: Americans, 19; Hollanders, 2; Germans, 5; Canadians, 1; Englishmen, 1; Irishmen, 1. Parentage of those born in the United States: American, 10; German, 4; Scotch, 1; Irish, 1; French 1; Holland, 2. Fifteen are married, 13 single, and 1 a widower. There are 36 children in the families, of which 20 attend school. Twelve of the employes support themselves only, while 17 support, other than themselves, 55 persons. Total number of months employed during the year, 329, an average of 11.8+. During the year 5 men lost time amounting to 234 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$15,970. Of the foreigners, 3 are not naturalized; 2 had \$260 upon arrival in this country. Total annual

family expenses, \$8,123. Ten employes paid \$182 dollars for working tools during the year. Six of the employes live at home and give their wages to their parents. Three men saved \$450 during the year. Five men have money at interest, amounting to \$1,025. Eight own homes valued at \$10,800. Of those owning homes 2 are mortgaged for \$600. Eight rent and pay a monthly rental of \$57, an average of \$7.12. Thirteen families own sewing machines, and 1 person has a piano. Nineteen take newspapers and magazines; 16 dailies, 19 weeklies and 6 monthlies. Seven board and pay \$31.50 per week, an average \$4.50. Four carry a total life insurance of \$7,000. Twelve belong to benefit societies, representing a weekly sick benefit of \$105, an average of \$8.75. All had good health when they began work. Present state of health: 26 good, 2 poor, and 1 did not answer. All can read and write. One is subject to loss of wages by error, waste or breakage. Eight are required to exercise more than ordinary care to prevent accidents. Two reported a decrease of wages during the past five years, 4 an increase, 14 the same, 4 did not answer, and 5 are boys under 16 years of age. Three pay cash when they purchase goods, 1 cash and credit, and 25 did not answer. Three keep an itemized account of their expenses. Fifteen are as well off as they were five years ago, 1 is not, 2 are better, 6 did not answer, and 5 are boys under 16 years of age.

CRESCENT FURNITURE AND MANUFACTURING CO., BIG RAPIDS,

Manufacturers of medium bedroom suits. Total wholesale value of goods manufactured during the past fiscal year, \$40,000. Number of employes, 73. Total amount of wages paid during the past fiscal year, \$10,540. Number of employes canvassed by this bureau, 55. Nationality: Americans, 37; Germans, 5; Swedes, 5; Canadians, 4; Englishmen, 2; Danes, 1; Hollanders, 1. Parentage of those born in the United States: American, 24; German, 5; French, 1; English, 8; Irish, 1; Swedish, 1; Canadian, 1; Holland, 1. Twenty-four are married and 31 single. There are 50 children in the families, of which 20 attend school. Twenty-eight employes support themselves only, while 27 support, other than themselves, 70 persons. Total number of months employed during the year, 532½, an average of 9.7+. During the year 44 men lost time amounting to 2,866 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$20,688. Of the foreigners, 2 are not naturalized; 1 had \$200 upon arrival in this country and 2 have sent \$20 to relatives in the old country. Total annual family expenses, \$10,697. Four of the employes live at home and give their wages to their parents. Fourteen men saved \$1,709 during the year. Two have money at interest, amounting to \$310. Nine own homes valued at \$5,225. Of those owning homes, 6 are mortgaged for \$1,315. Fifteen rent and pay a monthly rental of \$101.50, an average of \$6.76. Nineteen families own sewing machines; 4 persons have organs and 2 pianos. Twenty-six take newspapers and magazines: 23 dailies, 29 weeklies and 5 monthlies. Twenty-six board and pay \$87 per week, an average of \$3.34. Five carry a total life insurance of \$12,250. None belong to benefit societies. All had good health when they began work. Present state of health: 53 good, 1 fair and 1 poor. One cannot read or write. None are subject to loss of wages by error, waste or breakage. Five are required to exercise more than ordinary care to prevent accidents. Twelve reported a decrease of wages during the past 5 years, 10 an increase,

17 the same, 9 did not answer, and 7 are boys under 16 years of age. Two pay cash when they purchase goods, and 58 did not answer. Four keep an itemized account of their expenses. Twenty-five are as well off as they were 5 years ago, 7 are not, 11 are better, 5 did not answer and 7 are boys under 16 years of age.

BIG RAPIDS FURNITURE CO., BIG RAPIDS.

No report was received from this firm. Number of men canvassed by this bureau, 12. Nationality: Americans, 7; Germans, 8; Canadians, 1; Hollanders, 1. Parentage of those born in the United States: American, 5; German, 2. Seven are married and 5 are single. There are 25 children in the families, of which 15 attend school. Two of the employes support themselves only, while 10 support, other than themselves, 37 persons. Total number of months employed during the year, 108, an average of 9. During the year 8 men lost time amounting to 468 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$4,091. Of the foreigners 1 is not naturalized; 1 has sent \$2 to relatives in the old country. Total annual family expenses, \$2,775. Two men saved \$150 during the year. One man has \$50 at interest. Four men own homes valued at \$2,600. Of those owning homes 2 are mortgaged for \$600. Three rent and pay a monthly rental of \$14, an average of \$4.66. Six of the families own sewing machines; 1 person has an organ. Eight men take newspapers; 5 dailies, and 9 weeklies. Four board and pay \$11 per week, an average of \$2.75. All had good health when they began work, and all have good health at the present time. None are subject to loss of wages by error, waste or breakage. Three are required to exercise more than ordinary care to prevent accidents. One reported a decrease of wages during the past 5 years, 2 an increase, 6 the same, and 3 are boys under 16 years of age. None keep an itemized account of their expenses. Six are as well off as they were 5 years ago, 1 is not, on account of sickness, 2 are better off, and 3 are boys under 16 years of age.

GRAND LEDGE CHAIR CO., GRAND LEDGE,

Manufacturers of chairs. Total wholesale value of goods manufactured during the past fiscal year, \$85,000. Number of employes, 60. Total amount of wages paid during the past fiscal year, \$18,000. Number of employes canvassed by this bureau, 64. Nationality: Americans, 68; Canadians, 1. Parentage of those born in the United States: American, 56; Irish, 5; German, 2. Twenty-one are married and 43 single. There are 29 children in the families, of which 15 attend school. Forty of the employes support themselves only, while 24 support, other than themselves, 50 persons. Total number of months employed during the year, 743, an average of 11.6+. During the year 35 men lost time amounting to 653 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$20,351. Six employes paid \$20.85 for working tools during the year. Total annual family expenses, \$9,757. Fourteen men saved \$925 during the year. Three men have money at interest, amounting to \$55. Ten own homes, valued at \$10,300. None are mortgaged. Thirteen rent and pay a

monthly rental of \$60.50, an average of \$4.65. Twenty families own sewing machines; 4 have organs, 2 banjos, and 2 violins. Fifty take newspapers and magazines: 29 dailies, 86 weeklies, 28 monthlies. Twenty-six board and pay \$63.50 per week, an average of \$2.44. Two carry a total life insurance of \$2,000. None belong to benefit societies. Sixty-one had good health when they began work, and 3 poor. Present state of health: 52 good, 3 fair and 9 poor. One cannot write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents. Eight reported a decrease of wages during the past 5 years, 23 an increase, 17 the same, 2 did not answer, and 14 are boys under 16 years of age. Thirty-two pay cash when they purchase goods, 4 cash and credit, 2 did not answer, and 26 buy on credit. Five keep an itemized account of their expenses. Forty are as well off as they were 5 years ago, 1 better, 1 did not answer, 8 are not, and 14 are boys under 16 years of age.

WELCH FOLDING BED CO., SPARTA,

Manufacturers of the Welch combination folding bed. Total wholesale value of goods manufactured during the past fiscal year, \$90,000. Number of employes, 100. Total amount of wages paid during the past fiscal year, \$25,000. Number of employes canvassed by this bureau, 68. Nationality: Americans, 43; Swedes, 10; Canadians, 4; Danes, 2; Frenchmen, 1; Hollanders, 1; Irishmen, 1; Englishmen, 1. Parentage of those born in the United States: American, 41; Canadian, 1; Irish, 1. Thirty-one are married and 82 are single. There are 52 children in the families, of which 19 attend school. Twenty-five employes support themselves only, while 33 support, other than themselves, 98 persons. Total number of months employed during the year, 687½, an average of 10.9+. During the year 49 men lost time amounting to 989 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$28,617. Of the foreigners 8 are not naturalized; 3 had \$420 upon arrival in this country, and 1 has sent \$5 to relatives in the old country. Eleven employes paid \$111 for working tools during the year. Total family expenses, \$12,348. Four of the employes live at home and give their wages to their parents. Thirty-seven men saved \$4,016 during the year. Thirty-four have money at interest, amounting to \$9,368. Twelve own homes valued at \$12,175. Of those owning homes, 5 are mortgaged for \$1,085. Fifteen rent and pay a monthly rental of \$77.25, an average of \$5.15. Twenty-six families own sewing machines; 8 persons have organs, 1 a piano, 1 a horn and 2 guitars. Thirty-seven take newspapers and magazines: 20 dailies, 28 weeklies, and 7 monthlies. Twenty-three board and pay \$71.75 per week, an average of \$3.11. Nine carry a total life insurance of \$12,250. Two belong to benefit societies, representing a weekly sick benefit of \$10, an average of \$5. Sixty had good health when they began work, and 3 fair. Present state of health: 59 good, 3 fair and 1 poor. One cannot read and one cannot write. None are subject to loss of wages by error, waste or breakage. Nine are required to exercise more than ordinary care to prevent accidents. Seventeen reported a decrease of wages during the past 5 years, 23 an increase, 6 did not answer, 9 the same, and 8 are boys under 16 years of age. Fifty-five pay cash when they purchase goods, 7 did not answer, and 1 buys on credit. Ten keep an itemized account of their expenses. Fifteen are as well off as they were five years ago, 1 is not, 32 are better off, 7 did not answer, and 8 are boys under 16 years of age.

THE RING-BRADY CO., SAGINAW,

Manufacturers of medium priced bedroom suits. Total wholesale value of goods manufactured during the past fiscal year, \$90,000. Number of employes, 77. Total amount of wages paid during the past fiscal year, \$45,000. Number of employes canvassed by this bureau, 47. Nationality: Americans, 32; Germans, 7; Canadians, 5; Polanders, 1; Swiss, 1; Englishmen, 1. Parentage of those born in the United States: American, 16; German, 9; Swiss, 1; English, 1; Canadian, 8; Irish, 1; Danish, 1. Twelve are married, 34 are single and 1 a widower. There are 11 children in the families, and none attend school. Thirty-two of the employes support themselves only, while 15 support, other than themselves, 29 persons. Total number of months employed during the year, 437, an average of 9.2+. During the year 43 men lost time amounting to 3,146 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$16,430. Of the foreigners, 4 are not naturalized; 8 had \$105 upon arrival in this country, and 3 have sent \$370 to relatives in the old country. Fifteen men paid \$106 for working tools during the year. Total annual family expenses, \$6,127. Sixteen of the employes live at home and give their wages to their parents. Eight men saved \$784 during the year. Eight have money at interest, amounting to \$2,710. Three own homes, valued at \$2,000. Of those owning homes, all are mortgaged for a total of \$225. Ten rent, and pay a monthly rental of \$65, an average of \$6.50. Six families own sewing machines; 2 persons have organs, and 1 a guitar and zither. Fourteen take newspapers and magazines: 8 dailies, 12 weeklies and 8 monthlies. Seventeen board and pay \$59 per week, an average of \$3.47. Seven carry a total life insurance of \$15,600. Seven belong to benefit societies, representing a weekly sick benefit of \$55, an average of \$7.85. Forty-six had good health when they began work, and 1 fair. Present state of health: 42 good, 3 fair and 2 poor. Two are subject to loss of wages by error, waste or breakage. Three are required to exercise more than ordinary care to prevent accidents. Six report a decrease of wages during the past 5 years, 15 an increase, 13 the same, 4 did not answer, and 9 are boys under 16 years of age. Twenty-six pay cash when they purchase goods, 1 cash and credit, 4 buy on credit and 16 did not answer. Seven keep an itemized account of their expenses. Twenty-one are as well off as they were 5 years ago, 7 are not, 8 are better, 2 did not answer, and 9 are boys under 16 years of age.

SPENCER & BARNES, BUCHANAN,

Manufacturers of medium grades bedsteads, dressing cases, center and extension tables. Number of employes canvassed by this bureau, 46. Nationality: Americans, 44; Frenchmen, 1; Germans, 1. Parentage of those born in the United States: American, 41; French, 1; English, 1; German, 1. Thirty-one are married, and 15 single. There are 54 children in the families, of which 28 attend school. Fourteen of the employes support themselves only, while 32 support, other than themselves, 89 persons. Total number of months employed during the year, 454½, an average of 9.8+. During the year 40 men lost time amounting to 2,541 days. All work 10 hours, are paid

weekly and in cash. Total annual earnings, \$18,170. Of the foreigners, 1 had \$40 upon arrival in this country. Ten employes paid \$72 for working tools during the year. Total annual family expenses, \$10,280. Nineteen men saved \$1,720 during the year. One has money at interest amounting to \$100. Twelve own homes valued at \$8,050. Of those owning homes 4 are mortgaged for \$810. Twenty rent and pay a monthly rental of \$104.50, an average of \$5.22. Twenty-two of the families own sewing machines; 6 persons have organs, 2 cornets, 2 violins, 2 melodeons, 1 a horn, and 1 a trombone. Thirty-six take newspapers and magazines: 15 dailies, 47 weeklies, and 18 monthlies. Thirteen board and pay \$86.20, an average of \$2.78. Two carry a total life insurance of \$3,000. Forty-three had good health when they began work, 1 fair, and 2 poor. Present state of health: 25 good, 14 fair, and 7 poor. All can read and write. Two are subject to loss of wages by error, waste or breakage. Thirteen are required to exercise more than ordinary care to prevent accidents. Twenty-three reported a decrease of wages during the past five years, 18 an increase, 9 the same, and 1 did not answer. Forty-five pay cash when they purchase goods, and 1 buys on credit. Eight keep an itemized account of their expenses. Thirty-five are as well off as they were 5 years ago and 11 are not.

OSBORN FURNITURE CO., BUCHANAN,

Manufacturers of stands, center, library and refreshment tables. Total wholesale value of goods manufactured during the past fiscal year, \$4,045. Number of employes, 15. Total amount of wages paid during the past fiscal year, \$8,053. Number of employes canvassed by this bureau, 9. Nationality: Americans, 7; Canadians, 1; Germans, 1. Parentage of those born in the United States: All American. Seven are married and 2 are single. There are 12 children in the families, of which 4 attend school. Two of the employes support themselves only, while 7 support, other than themselves, 19 persons. Total number of months employed, 76, an average of 8.4+. During the year 9 men lost time amounting to 832 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$3,029. Four employes paid \$20 for working tools during the year. Total annual family expenses, \$2,689. One man saved \$150 during the year. Two own homes valued at \$1,750. One is mortgaged for \$200. Five rent and pay \$25.25 per month, an average of \$5.05. Six of the families own sewing machines; 1 person has a violin. Eight men take newspapers: 1 daily, 11 weeklies, and 4 monthlies. One boards and pays \$1.50 per week. One belongs to a benefit society representing a weekly sick benefit of \$3. All had good health when they began work. Present state of health: 6 good, 1 fair and 2 poor. All can read and write. One is subject to loss of wages by error, waste or breakage. Five are required to exercise more than ordinary care to prevent accidents. Five reported a decrease of wages during the past five years, 2 an increase, 1 the same, and 1 did not answer. Seven pay cash when they purchase goods, and 2 did not answer. Four keep an itemized account of their expenses. Six are as well off as they were 5 years ago, 3 are not.

EMPIRE FURNITURE CO., CONSTANTINE,

Manufacturers of bedroom suits. Total wholesale value of goods manufactured during the past fiscal year, \$80,000. Number of employees, 46. Total amount of wages paid during the past fiscal year, \$15,000. Number of employees canvassed by this bureau, 46. Nationality: Americans, 38; Canadians, 8; Germans, 8; Swiss, 2. Parentage of those born in the United States: American, 34; German, 1; French, 1; English, 2. Twenty-three are married, 21 single, and 2 are widowers. There are 45 children in the families, of which 18 attend school. Twenty-two of the employees support themselves only, while 24 support, other than themselves, 62 persons. Total number of months employed during the year, 543½, an average of 11.8+. During the year 9 men lost time amounting to 70 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$30,833. Of the foreigners, 8 are not naturalized; 4 had \$390 upon arrival in this country, and 3 have sent \$140 to relatives in the old country. Thirteen employees paid \$105 for working tools during the year. Total annual family expenses, \$10,085. Six of the employees live at home and give their wages to their parents. Twenty men saved \$3,878 during the year. Sixteen have money at interest amounting to \$7,630. Nine own homes valued at \$6,455. Of those owning homes 4 are mortgaged for \$1,150. Nineteen rent and pay a monthly rental of \$126.50, an average of \$6.65. Twenty-one families own sewing machines, 8 persons have organs, 1 a piano, and 1 a life. Thirty-one men take newspapers and magazines: 22 dailies, 23 weeklies and 4 monthlies. Sixteen board and pay \$48 per week, an average of \$2.66. Six carry a total life insurance of \$4,700. Two belong to benefit societies representing a weekly sick benefit of \$8, an average of \$4. Forty-four had good health when they began work, and 2 poor. Present state of health: Forty-four good and 2 poor. All can read and write. One is subject to loss of wages by error, waste or breakage. Eleven are required to exercise more than ordinary care to prevent accidents. Four reported a decrease of wages during the past 5 years, 14 an increase, 9 the same, 18 did not answer, and 6 are boys under 16 year of age. Thirty-nine pay cash when they purchase goods, 1 cash and credit, 2 buy on credit and 4 did not answer. Seventeen keep an itemized account of their expenses. Twenty-seven are as well off as they were 5 years ago, 7 are not, 1 is better, 5 did not answer, and 6 are boys under 16 years of age.

MICHIGAN FURNITURE CO., ANN ARBOR,

Manufacturers of chamber suits. Total wholesale value of goods manufactured during the past fiscal year, \$55,577. Number of employees, 60. Total amount of wages paid during the past fiscal year, \$19,780. Number of employees canvassed by this bureau, 43. Nationality: Americans, 18; Germans, 24; Canadians, 1. Parentage of those born in the United States: American 2; German 16. Twenty-one are married, 21 single, and 1 a widower. There are 62 children in the families, of which 20 attend school. Twenty of the employees support themselves only, while 28 support, other than themselves, 69 persons. Total number of months employed during the year, 467½, an average of 10.8+. During the year 20 men lost time amounting to 357

days. All work 10 hours, are paid monthly and in cash. Total annual earnings, \$15,113. Of the foreigners 12 had \$1,158 upon arrival in this country, and 7 have sent \$315 to relatives in the old country. Sixteen employes paid \$96.10 for working tools during the year. Total annual family expenses, \$9,356. Fourteen of the employes live at home and give their wages to their parents. Ten men saved \$1,080 during the year. Ten have money at interest, amounting to \$6,955. Twelve own homes valued at \$18,325. Of those owning homes, 6 are mortgaged for \$3,250. Ten rent and pay a monthly rental of \$66, an average of \$6.60. Nineteen families own sewing machines; 4 persons have organs, 2 zithers and 1 a violin. Twenty-six men take newspapers : 2 dailies, and 38 weeklies. Six board and pay \$19.50, per week, an average of \$3.25. Six carry a total life insurance of \$11,500. Fourteen belong to benefit societies, representing a weekly sick benefit of \$76, an average of \$5.42. Forty-two had good health when they began work, and 1 fair. Present state of health: 42 good and 1 poor. Four cannot read and four cannot write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents. Six reported a decrease of wages during the past 5 years, 11 an increase, 15 the same, 2 did not answer, and 9 are boys under 16 years of age. Thirty-two pay cash when they purchase goods, 6 cash and credit, 4 buy on credit, and 1 did not answer. Seven keep an itemized account of their expenses. Fifteen are as well off as they were 5 years ago, 1 is not, 17 are better off, and 9 are boys under 16 years of age.

WERKMAN MANUFACTURING CO., HOLLAND,

Manufacturers of cheap beds and chamber suits. Total wholesale value of goods manufactured during the past fiscal year, \$68,000. Number of employes, 70. Total amount of wages paid during the past fiscal year, \$24,800. Number of employes canvassed by this bureau, 23. Nationality : Americans, 11 ; Hollanders, 11 ; Germans, 1. Parentage of those born in the United States : American, 3 ; Holland, 8. Twelve are married and 11 are single. There are 28 children in the families, of which 7 attend school. Eleven of the employes support themselves only, while 12 support, other than themselves, 36 persons. Total number of months employed during the year, 249, an average of 10.8+. During the year 21 men lost time amounting to 702 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$7,841. Two of the employes paid \$8 for working tools during the year. Total annual family expenses, \$4,075. Eight of the employes live at home and give their wages to their parents. Seven men saved \$350 during the year. One has \$75 at interest. Four own homes valued at \$3,300. Two are mortgaged for \$450. Eight rent and pay a monthly rental of \$39.25, an average of \$4.90. Eight families own sewing machines, and 1 person has an organ. Twelve men take newspapers and magazines : 6 dailies, 9 weeklies, and 2 monthlies. Two board and pay \$3 each per week. One carries a life insurance of \$1,000. All had good health when they began work. Present state of health : 21 good, and 2 fair. All can read and write. None are subject to loss of wages by error, waste or breakage. Three are required to exercise more than ordinary care to prevent accidents. Six reported a decrease of wages during the past 5 years, 3 an increase, 3 the same, 6 did not answer, and 5 are boys under 16 years of age.

Thirteen pay cash when they purchase goods, 2 buy on credit, and 8 did not answer. Three keep an itemized account of their expenses. Five are as well off as they were 5 years ago, 2 are not, 8 are better, 3 did not answer, and 5 are boys under 16 years of age.

R. & A. M. KANTERS, HOLLAND.

No report was received from this firm. Number of employes canvassed by this bureau, 18. Nationality: Americans, 10; Hollanders, 6; Germans, 2. Parentage of those born in the United States: American, 2; Holland, 7; English, 1. Six are married, 11 single and 1 a widower. There are 14 children in the families, of which 10 attend school. Eleven of the employes support themselves only, while 7 support, other than themselves, 20 persons. Total number of months employed during the year, 184½, an average of 10.2+. During the year 18 men lost time amounting to 344 days. All work 10 hours, are paid semi-monthly and in cash. Total annual earnings, \$6,282. Two employes paid \$11 for working tools during the year. Total annual family expenses, \$2,448. Seven of the employes live at home and give their wages to their parents. Five men saved \$525 during the year. Four have money at interest, amounting to \$2,055. Three own homes valued at \$2,700. Three are mortgaged for \$1,750. Four rent and pay a monthly rental of \$24.50, an average of \$6.12. Five families own sewing machines; 1 person has an organ, and 1 a piano. Ten take newspapers and magazines: 3 dailies, 12 weeklies and 8 monthlies. Two board and pay \$7.50 per week, an average of \$3.75. Two men carry a total life insurance of \$2,000. One belongs to a benefit society and receives \$10 a week in case of sickness. All had good health when they began work and all have good health at the present time. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents. Six reported a decrease of wages during the past 5 years, 1 an increase, 2 the same, 5 did not answer, 3 are boys under 16 years of age, and 1 has been in this country less than one year. Eleven pay cash when they purchase goods, and 7 did not answer. Two keep an itemized account of their expenses. Seven are as well off as they were 5 years ago, 3 better, 4 did not answer, 3 are boys under 16 years of age, and 1 has been in this country less than 1 year.

G. N. & J. W. POTTER, POTTERVILLE,

Manufacturers of tables, bedsteads and chamber suits. Total wholesale value of goods manufactured during the past fiscal year, \$45,000. Number of employes, 45. Total amount of wages paid during the past fiscal year, \$15,000. Number of employes canvassed by this bureau, 40. Nationality: Americans, 39; Germans, 1. Parentage of those born in the United States: American, 37; German, 2. Twenty-five are married, 14 are single, and 1 a widower. There are 44 children in the families, of which 25 attend school. Ten of the employes support themselves only, while 30 support, other than themselves, 77 persons. Total number of months employed during the year, 441½, an average of 11.0+. During the year 28 men lost time, amounting to 889 days.

All work 10 hours, are paid weekly and in cash. Total annual earnings, \$14,655. Of the foreigners 1 had \$50 upon arrival in this country. Total annual family expenses, \$10,345. Five of the employees live at home and give their wages to their parents. Nine men saved \$768 during the year. Five have money at interest, amounting to \$625. Seventeen own homes valued at \$10,500. Of those owning homes two are mortgaged for \$280. Eight rent and pay a monthly rental of \$29, an average of \$3.62. Eighteen families own sewing machines, and 5 persons have organs. Seventeen men take newspapers and magazines: 6 dailies, 20 weeklies and 1 monthly. Six board and pay \$16.50 per week, an average of \$2.75. One carries a life insurance of \$1,000. One belongs to a benefit society representing a weekly sick benefit of \$6. Thirty-eight had good health when they began work, and 2 fair. Present state of health: 35 good, 3 fair and 2 poor. All can read and write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents. One reported a decrease of wages during the past five years. Seven reported an increase of wages, 27 the same, 2 did not answer, and 3 are boys under 16 years of age. Thirty-two pay cash when they purchase goods, and 8 buy on credit. None keep an itemized account of their expenses. Thirty-five are as well off as they were five years ago, 2 are better, and 3 are boys under 16 years of age.

CONVERSE FURNITURE CO., NEWAYGO.

No report was received from this firm. Number of men canvassed by this bureau, 35. Nationality: Americans, 20; Hollanders, 2; Swedes, 9; Germans, 2; Englishmen, 1; Canadians, 1. Parentage of those born in the United States: American, 4; Irish, 4; Scotch, 2; French, 1; English, 8; German, 1. Thirteen are married and 22 single. There are 40 children in the families, of which 12 attend school. Twenty-two of the employees support themselves only, while 18 support, other than themselves, 43 persons. Total number of months employed during the year, 376, an average of 10.7+. During the year 28 men lost time amounting to 871 days. All work 10 hours, are paid monthly and in cash. Total annual earnings, \$14,292. Of the foreigners, 4 had \$110 upon arrival in this country, and 3 have sent \$125 to relatives in the old country. Seven employees paid \$46.50 for working tools during the year. Total annual family expenses, \$4,371. Two of the employees live at home and give their wages to their parents. Twelve men saved \$1,020 during the year. Four men have \$2,400 at interest. Nine men own homes, valued at \$5,700. Of those owning homes, 5 are mortgaged for \$700. Four rent and pay a monthly rental of \$18.25, an average of \$4.56. Eleven families own sewing machines, and 4 persons have organs. Nineteen men take newspapers and magazines: 11 dailies, 18 weeklies, and 5 monthlies. Twenty board and pay \$65.25 per week, an average of \$3.26. Two carry a total life insurance of \$2,000. All had good health when they began work. Present state of health: 33 good, 1 fair and 1 poor. One cannot read and 1 cannot write. None are subject to loss of wages by error, waste or breakage. Three are required to exercise more than ordinary care to prevent accidents. One reported a decrease of wages during the past 5 years, 9 an increase, 21 the same, 3 are boys under 16 years of age, and 1 has been in this country less than 1 year. Thirty-one pay cash when they purchase goods, and 4 did not answer. One keeps an

itemized account of his expenses. Twenty-six are as well off as they were 5 years ago 4 are not, 1 better, 3 are boys under 16 years of age, and 1 has been in this country less than 1 year.

A. E. PALMER, HILLSDALE,

Manufacturer of frames and upholstered furniture. Total wholesale value of goods manufactured during the past fiscal year, \$40,000. Number of employes, 85. Total amount of wages paid during the past fiscal year, \$10,000. Number of employes canvassed by this bureau, 21. Nationality: Americans, 19; Germans, 2. Parentage of those born in the United States: American, 17; English, 1; Irish, 1. Nine are married, 11 single, and 1 a widower. There are 18 children in the families, of which 3 attend school. Eleven of the employes support themselves only, while 10 support, other than themselves, 27 persons. Total number of months employed during the year, 214, an average of 10.1+. During the year 19 men lost time amounting to 987 days. All work 10 hours are paid weekly and in cash. Total annual earnings, \$8,699. Twelve men paid \$35.45 for working tools during the year. Total annual family expenses, \$4,420. Five men saved \$360 during the year. Five have money at interest amounting to \$615. Three own homes valued at \$3,100. None are mortgaged. Seven rent and pay a monthly rental of \$47, an average of \$6.71. Six families own sewing machines; 2 persons have organs, 2 pianos, 2 violins. Twelve men take newspapers and magazines: 8 dailies, 16 weeklies and 3 monthlies. Nine men board and pay \$25.75 per week, an average of \$2.86. Five carry a total life insurance of \$8,000. One belongs to a benefit society, representing a weekly sick benefit of \$5. All had good health when they began work. Present state of health: 20 good, and 1 fair. All can read and write. None are subject to loss of wages by error, waste or breakage. None are required to exercise more than ordinary care to prevent accidents. Three reported a decrease of wages during the past 5 years, 9 an increase, 9 the same. Eighteen pay cash when they purchase goods, and 3 buy on credit. Two keep an itemized account of their expenses. Nineteen are as well off as they were 5 years ago, and 2 are not.

SKALLA FURNITURE CO., NILES.

No report was received from this firm. Number of employes canvassed by this bureau, 18. Nationality: Americans, 12; Germans, 1. Parentage of those born in the United States: American, 1; Holland, 4; German, 2; Austrian, 3; Irish, 2. Six are married and 7 single. There are 7 children in the families, of which 3 attend school. Four of the employes support themselves only, while 9 support, other than themselves, 18 persons. Total number of months employed during the year, 147½, an average of 11.8+. During the year 7 men lost time amounting to 214 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$5,897. Of the foreigners 1 is not naturalized. One foreigner had \$5 upon arrival in this country. Three men paid \$18 for working tools during the year. Total annual family expenses, \$3,870. Five of

the employees saved \$480 during the year. Seven have \$2,527 at interest. Five own homes valued at \$3,200. None are mortgaged. Four rent and pay a monthly rental of \$22, an average of \$5.50. Six families own sewing machines; 2 persons have violins, and 1 a banjo. Thirteen men take newspapers and magazines: 6 dailies, 9 weeklies, and 2 monthlies. Four board and pay \$13 per week, an average of \$3.25. Two carry a total life insurance of \$5,500. Two belong to benefit societies, representing a weekly sick benefit of \$8.50, an average of \$4.25. Eleven had good health when they began work and 2 fair. Present state of health: 10 good, 2 fair, and 1 poor. All can read and write. None are subject to loss of wages by error, waste or breakage. Three are required to exercise more than ordinary care to prevent accidents. One reported a decrease of wages during the past five years, 7 reported an increase, and 5 did not answer. Twelve pay cash when they purchase goods, and 1 buys on credit. None keep an itemized account of their expenses. Nine are as well off as they were 5 years ago, 2 are not, and 2 did not answer.

OLIVER & CO., ALLEGAN,

Manufacturers of extension and center tables, bedsteads, and desks. Total wholesale value of goods manufactured during the past fiscal year, \$12,000. Number of employees, 18. Total amount of wages paid during the past fiscal year, \$8,000. Number of employees canvassed by this bureau, 11. Nationality: Americans, 6; Germans, 4; Swiss, 1. Parentage of those born in the United States: American, 5; Scotch, 1. Eight are married and 8 single. There are 17 children in the families, of which 10 attend school. Three of the employees support themselves only, while 8 support, other than themselves, 27 persons. Total number of months employed during the year, 107, an average of 9.7+. During the year 11 men lost time amounting to 650 days. All work 10 hours, are paid weekly and in cash. Total annual earnings, \$4,164. Of the foreigners, 3 had \$100 upon arrival in this country, and 2 have sent \$110 to relatives in the old country. Four employees paid \$38.10 for working tools during the year. Total annual family expenses, \$2,484. Four men saved \$205 during the year. Seven men own homes valued at \$4,400; 4 are mortgaged for \$780. One rents and pays a monthly rental of \$4. Six families own sewing machines; none own musical instruments. Five take newspapers: 2 dailies, and 6 weeklies. Three board and pay \$9 per week, an average of \$3. Four carry a total life insurance of \$3,000. Four belong to benefit societies, representing a weekly sick benefit of \$12, an average of \$3. All had good health when they began work. Present state of health: 8 good, 1 fair and 2 poor. One cannot read and 1 cannot write. None are subject to loss of wages by error, waste or breakage. Five are required to exercise more than ordinary care to prevent accidents. Five reported a decrease of wages during the past 5 years, 2 an increase and 4 the same. Ten pay cash when they purchase goods, and 1 did not answer. Three keep an itemized account of their expenses. Four are as well off as they were 5 years ago, and 7 are not.

SUMMARY.

Outside of Grand Rapids and Detroit 35 factories were canvassed, as follows: Estey Manufacturing Co., Woodward Bros., and the Robbins Table Co., of Owosso; Globe Furniture Co., Granville Wood & Son, and Ely Dowel and Manufacturing Co., of Northville; Adrian Furniture Co., of Adrian; Curtis & Bennett, Charlotte Manufacturing Co., and Houck & Perkins, of Charlotte; Aulsbrook & Sturges, Grobhiser & Crosby Furniture Co., and Wait & Barnes Furniture Co., of Sturgis; Filertown Manufacturing Co., and Manistee Manufacturing Co., of Maristee; St. Johns Manufacturing Co., of St. Johns; C. D. Stuart, of Otsego; Muskegon Valley Furniture Co. and Kelley Bros. Manufacturing Co., of Muskegon; Crescent Furniture Co. and Big Rapids Furniture Co., of Big Rapids; Grand Ledge Chair Co., of Grand Ledge; Welch Folding Bed Co., of Sparta; Ring-Brady Co., of East Saginaw; Spencer & Barnes and Osborn Furniture Co., of Buchanan; Empire Furniture Co., of Constantine; Michigan Furniture Co., of Ann Arbor; Werkman Manufacturing Co. and R. & A. M. Kanter, of Holland; G. N. & J. W. Potter, of Potterville; Converse Furniture Co., of Newaygo; A. E. Palmer, of Hillsdale; Skalla Furniture Co., of Niles; Oliver & Co., of Allegan.

To our request for the wholesale value of goods manufactured during their fiscal year, the total number of employes, and the total amount of wages paid, the following 5 firms failed to make returns to this office: Curtis & Bennett, of Charlotte; Big Rapids Furniture Co., of Big Rapids; Converse Furniture Co., of Newaygo, and the Skalla Furniture Co., of Niles. The remaining 30 firms gave the desired information, as follows: Total number of employes upon their pay roll on the first pay day in May, 1889, 2,092. The total wholesale value of goods manufactured during their fiscal year was \$1,902,494.

The total amount of wages paid was \$662,160, amounting to \$316 52 per capita (man and boy) per year. The wages paid amounted to .34+ per cent of the wholesale value of the goods produced. In the 35 factories the special agents of this bureau made a canvass of 1,618 men and boys. Nationality: Americans, 1,189; Hollanders, 49; Swedes, 39; Germans, 177; Polanders, 6; Scotchmen, 5; Englishmen, 31; Canadians, 80; Frenchmen, 8; Danes, 14; Austrians, 2; Irishmen, 8; Belgians, 1; Swiss, 6; Central American, 1; Italian, 1, and Norwegians, 6. Of the employes, .26+ per cent are foreign born. Parentage of those born in the United States: American, 917; Holland, 32; German, 119; English, 40; Irish, 47; Canadian, 11; Scotch, 8; Austrian 3; French, 5; Danish, 2; Swedish, 1; Belgian, 1; Swiss, 3. Of the 1,189 employes who are reported as having been born in the United States, .22+ per cent had foreign parents. Of the total number of employes canvassed 844 are married, 34 are widowers and 740 single; .52+ per cent are married (including the widowers as having families).

There are 1,784 children in the families, of which number 780 attend school. Six hundred and eighty employes support themselves only, while 944 support other than

themselves, 2,686 persons. Total number of months employed during the year, 17,440½, an average of 10.7+. One thousand one hundred and fifteen employees lost time during the year, amounting to 42,650 days. All of the factories work 10 hours a day. All pay their employees in cash. All pay weekly except the following: Adrian Furniture Co., Aulsbrook & Sturges, Grobhisser & Crosby, Wait & Barnes, Manistee Manufacturing Co., Muskegon Valley Furniture Co., Kelley Bros, Crescent Furniture Co., Big Rapids Furniture Co., Grand Ledge Chair Co., Ring-Brady Co., Osborn Furniture Co., Werkman Manufacturing Co., R. & A. M. Kanters, who pay semi-monthly, and the following firms who pay monthly; Filertown Manufacturing Co., St. Johns Manufacturing Co., and the Converse Furniture Co. The total annual earnings are \$639,501, amounting to \$395.24 per capita (man and boy) per year. Of the foreigners 59 are not naturalized; 133 had money upon arrival in this country, amounting to \$17,590.85. Forty-nine have sent money to relatives and friends in the old country, amounting to \$3,081.90; .81+ per cent of the foreigners had money upon arrival in this country. Three hundred and fifty four of the employees paid \$3,080.45 for working tools during the year.

Total annual family expenses, \$357,967, amounting to \$99.99 per capita. One hundred and forty-six of the employees live at home and give their wages to their parents, which is .09+ per cent of the employees. Five hundred and forty-eight saved \$60,296 during the year, which included payments upon homes. Thirty-three per cent of the employees saved money; .09+ per cent of the total earnings were saved. Two hundred have money in the savings banks or at interest, amounting to \$80,711. Four hundred and ninety-one own homes valued at \$471,870. Of the employees 19 years of age and over, .38+ per cent own homes. Two hundred and thirty-six of those owning homes are mortgaged for a total of \$85,080. Three hundred and eighty-four rent and pay a total monthly rental of \$2,180.74, an average of \$5.87. The total annual rent amounts to \$26,168.88, an average of \$68.14 per year for each person renting. The per cent of rent to annual earnings is .18+, and the per cent of rent to family expenses is .15+.

Of the families .43+ per cent rent. Six hundred and eighty-one families own sewing machines, which is .77+ per cent. One hundred and seventy-six employees own organs, 22 pianos, 12 melodeons, 8 guitars, 8 banjos, 8 cornets, 5 horns, 1 a clarinet, 2 accordions, 3 zithers, 28 violins, 1 a bass viol and 1 a flute. Sixteen per cent own musical instruments. One thousand and sixty-eight take newspapers and magazines, which is .66+ per cent of the whole number of employees. Five hundred and eighteen daily papers are taken, 1,298 weeklies and 247 monthlies. Five hundred and sixteen board, which is .81+ per cent of the employees. The total weekly cost for board and room is \$1,605.80, an average of \$3.11. Total annual board, \$83,501.60. Two hundred and three carry life insurance, which is .12+ per cent of the employees. The total life insurance is \$320,755. Two hundred and eighty-four belong to benefit societies, which is .17+ per cent of the employees. The total weekly benefit in case of sickness or accident, amounts to \$1,631.24, an average of \$5.74. One thousand five hundred and sixty-two had good health when they began work, 81 fair, 21 poor, and 1 did not answer. Present state of health: 1,829 good, 189 fair, 96 poor, and 2 did not answer. Twenty-nine cannot read, and 37 cannot write. Twenty-six employees are subject to loss of wages by error, waste or breakage, 1,526 are not, and 66 did not answer. Two hundred and fifty-eight are required to exercise more than ordinary care to prevent accidents to themselves or others, 1,272 are not, and 88 did not answer. Two hundred and sixty-two reported a decrease of wages during the past 5 years, 590 an increase, 457 the same, 184 did not

answer, 158 are boys under 16 years of age, and 17 have been in this country less than one year.

Those who reported a decrease, gave as a reason: 19 competition, 16 change of occupation, 59 gave no reason, 12 emigration, 36 change of work, 1 monopoly, 18 surplus labor, 8 change of trade, 5 dull times, 1 introduction of machinery, 2 change of business, 8 dull trade, 1 depression of trade, 1 general reduction, 1 increase of men, 1 on account of age, 1 no demand for labor, 2 too much machinery, 2 over production, 4 don't know, 1 can't get more, 1 cutting prices, 7 hard times, 2 sickness, 1 change of location, 1 too many workers, 4 cut down, 4 machinery, 5 foreign labor, 4 no work to do, 3 too many men, 2 less work, 2 old age, 1 used to do piece work, 1 smaller crew to oversee, 1 too many machine hands, 1 different business, 2 change of firm, 1 scarcity of work, 1 too many for the work, 2 machinery and foreign labor, 1 less work and less wages, 1 formerly did contract labor, 1 am older and do less work, 3 cut in wages, 1 inability to do work, 4 no reason, 1 too long working hours, 1 too many men and machinery, 3 lower wages, 2 change of place, 3 change of employment, 1 change of factory, 1 change of work and position, 1 wages 25 per cent lower, 1 tariff and trusts, 1 machinery, protection and emigration, 1 improved machinery and surplus labor, 1 different work, 1 taxation. Those who reported an increase gave as a reason: 118 more skillful, 8 labor unions, 92 more ability, 13 do better work, 11 continued service, 25 gave no reason, 48 more experience, 11 change of work, 2 longer service, 25 promotion, 6 more work, 6 change of occupation, 2 change of trade, 2 competition, 5 trade, 1 more competent, 1 increased ability, 1 more business, 1 business demands it, 5 business improved, 82 business better, 2 change of position, 1 more ability and change of place, 1 offered better pay elsewhere, 3 change of location, 5 am older, 1 more experience, 1 organization of labor, 63 increased skill, 1 don't know, 1 more skill and experience, 2 am able to do more work, 1 understand work better, 2 understand machine better, 3 change of country, 3 perfected myself, 2 better class of work, 1 different work, 1 higher position, 1 change of firm, 1 different class of work, 1 increased business, 2 increased protection, 1 better times, 1 more factories that want good men, 12 more perfect, 3 advanced in work, 1 advanced in trade, 1 would not work for less, 1 deserve, 1 paid according to work, 4 improvement, 2 change of business, five change of place.

One thousand one hundred and seventeen pay cash when they purchase goods, 55 both pay cash and buy on credit, 217 buy on credit, and 229 did not answer. One hundred and ninety-four keep an itemized account of their expenses, 1,298 do not, and 126 did not answer. Nine hundred and sixty-two are as well off as they were 5 years ago, 183 are not, 210 are better off, 88 did not answer, 158 are boys under 16 years of age, and 17 have been in this country less than one year. Those who are not as well off as they were 5 years ago gave as a reason: 24 financially, 1 less wages and higher cost of living, 16 lower wages, 1 less wages and less work, 35 sickness, 1 poor investment, 1 can't live on wages, 1 previously out of work for some time, 15 no reason given, 1 too many in the family for wages received, 1 loss of business, 1 failure of crops, 3 loss of property by fire, 1 no work, 1 decrease in wages, 1 lost time and poor health, 1 larger family, 2 larger family and less wages, 1 parents to support, 5 poor health, 3 larger expenses, 1 bad luck and sickness, 4 in all respects, 1 sickness and in all respects, 6 lost property, 4 lost money, 1 lost home, 1 lost \$800, 1 expense equal to income, 4 less work, 2 physically and financially, 1 injured, 1 am older, 2 less wages and older, 1 family trouble, 2 misfortune, 1 loss of father, 1 domestic affairs, 2 unfortunate, 1 harder for work, 1 change of employment, 1 signing papers, 2 less money, 1 lost in speculation, 1

lost \$2,000 in speculation, 1 out of work, 1 lost \$900, 1 bad luck, 1 gave no reason, 1 drinking has caused loss of my home, 1 moving and changing employment, 1 speculation, 1 increase of family expense, 1 change of position and less wages, 1 sickness and lower wages, 1 lost \$1,400, 1 lost \$500, 1 less wages and hard times, 1 loss of hand and less wages, 8 lost money in business, 1 general reason, 1 expenses, 1 lost money in speculation, 2 loss of hand, 1 loss of wages, 1 lost a boy and caused expense, 1 had a home free of debt and now owe all it is worth, 1 family too large, 1 spent \$182 traveling. No girls were canvassed outside of Grand Rapids and Detroit.

LAW CREATING AND GOVERNING THE BUREAU OF LABOR AND INDUSTRIAL STATISTICS OF MICHIGAN.

SECTION 1. The Governor is hereby authorized and empowered to appoint, within sixty days after this act shall take effect, and every second year thereafter, in the month of February, by and with the advice and consent of the senate, and also within thirty days after the occurrence of any vacancy in the office, a suitable person, who shall be a citizen of this State, as commissioner, who shall hold his office until his successor is appointed and qualified, the title of which officer shall be Commissioner of Labor. Such commissioner shall keep his office at the capitol, in the city of Lansing, and shall appoint a deputy, whose term of office shall continue during the pleasure of such commissioner. The commissioner may appoint such assistants, from time to time, as shall be necessary for the transaction of the business of his office. Said commissioner, with his deputy, and the Secretary of State, who shall be *ex officio* member thereof, shall constitute a bureau of statistics of labor.

SEC. 2. The duties of such bureau shall be to collect in the manner hereinafter provided, assort, systemize, print, and present in annual reports to the Governor, on or before the first day of February, eighteen hundred and eighty-four, and annually thereafter, statistical details relating to all departments of labor in this State, including the penal institutions thereof, particularly concerning the hours of labor, the number of laborers and mechanics employed, the number of apprentices in each trade, with the nativity of such laborers, mechanics and apprentices, wages earned, the savings from the same, the culture, moral and mental, with age and sex of laborers employed, the number and character of accidents, the sanitary condition of institutions where labor is employed, as well as the influence of the several kinds of labor, and the use of intoxicating liquors upon the health and mental condition of the laborer, the restrictions, if any, which are put upon apprentices when indentured, the proportion of married laborers and mechanics who live in rented houses, with the average annual rental of the same, the average number of members in the families of married laborers and mechanics, the value of property owned by laborers and mechanics, together with the value of property owned by such laborers or mechanics (if foreign born) upon their arrival in this country, and the length of time they have resided here, the subjects of coöperation, strikes, or other labor difficulties, trades unions, and other labor organizations, and their effects upon labor and capital, with such other matter relating to the commercial, industrial, and sanitary condition of the laboring classes, and permanent prosperity of the respective industries of the State as such bureau may be able to gather, accompanied by such recommendations relating thereto, as the bureau shall deem proper.

SEC. 3. Such bureau, or any member thereof, shall have full power to examine witnesses on oath, compel the attendance of witnesses, the giving of testimony while act-

ing in any part of this State, and witnesses may be summoned by such bureau, or any member thereof, by its process in the same manner, and paid the same fees as are allowed to witnesses attending in the circuit court of any county: *Provided*, No witness shall be compelled to go outside the county in which he resides, to testify.

SEC. 4. The compensation of such commissioner shall be two thousand dollars per annum, and that of his deputy fifteen hundred dollars per annum, which compensation, together with all necessary expenses, including the employment and paying the expenses of such assistants as are provided for in section one of this act, also the expenses provided for in section three of this act, shall be audited and paid in the same manner as the salaries and expenses of other State officers: *Provided*, The amount thereof, exclusive of the compensation allowed to said commissioner and his said deputy, shall not, in any one year, exceed the sum of six thousand dollars: *And provided further*, That in addition to the above allowance for expenses, said bureau shall be authorized to have printed not to exceed four thousand copies of its annual reports for the use of the bureau for general distribution, and all printing, binding, blanks, stationery, or map work, shall be done or furnished under any contract which the State now has, or shall have, for similar work or supplies with any party or parties, and the expenses thereof shall be audited and paid for in the same manner as other State printing or supplies.

SEC. 5. Said bureau may collect the information called for in section two of this act, or such information as shall by the commissioner be considered essential to perfect the work of the bureau, from the several State, county, city, village and township officers, and from the officers of prisons, penal and reformatory institutions, or by means of special canvassers under the direction of the commissioner, and it shall be the duty of all such officers to furnish upon the written or printed request of the commissioner, such information as shall be considered necessary for the bureau, upon blanks furnished by said bureau.

SEC. 6. It shall be the duty of the several supervisors of the townships, and the supervisor or assessor of the wards of cities in this State, at the time of assessing the property thereof, to obtain the facts and information determined upon by said bureau, as provided in section five of this act, in accordance with the terms, conditions, and requirements of said blanks, and to return said blanks properly filled and duly certified to, by such officer, without delay to the Commissioner of Labor at Lansing.

SEC. 7. Any person who shall willfully and intentionally testify falsely, shall be deemed guilty of a felony, and on conviction thereof, shall be punished by imprisonment in the State prison for a period not exceeding five years, and any person who shall refuse to testify before said bureau or before any member thereof, shall, on conviction thereof, be deemed guilty of a misdemeanor, and shall be punished by a fine not exceeding one hundred dollars, or imprisonment not exceeding sixty days, or both in the discretion of the court: *Provided*, That no person or corporation shall be required to answer any question that shall be improper subject of inquiry or foreign to the object of this act.

PROCEEDINGS AT THE SEVENTH ANNUAL SESSION
OF THE
National Convention of Chiefs and Commissioners
OF THE VARIOUS
BUREAUS OF STATISTICS OF LABOR
IN THE UNITED STATES,
HELD AT
Hartford, Conn., June 25, 26 and 27, 1889.

PROCEEDINGS.

The Seventh Annual Convention of Chiefs and Commissioners of the several Bureaus of Labor Statistics in the United States, met in the Senate Chamber, in the State capitol building, Hartford, Connecticut, at 2:25 o'clock on the afternoon of Tuesday, June 25, 1889.

The convention was called to order by President Carroll D. Wright, of Washington, D. C., with Col. E. R. Hutchins as secretary.

In opening the convention, President Wright spoke as follows:

GENTLEMEN—We can congratulate ourselves upon the generosity and courtesy of the State of Connecticut for the privilege and the pleasure, too, of meeting in this beautiful hall. The legislature, by official action, has placed the rooms of the capitol at our disposal, and so we have met in exceedingly pleasant ways, and we hope to have the deliberation which belongs to a Senate Chamber.

Let me call your attention to the progress of the work of the bureaus of labor statistics in the United States; to the greatly increased interest which the work of these bureaus commands from all parts; to the support given to it by the manufacturers and working men; and to the confidence which the results of our labors inspire among all classes. These results are making actual contributions to political and economic science. The bureaus are not solving great labor or economical problems, but they are contributing most important information, and presenting it without bias. It is not our business to seek or offer solutions; it is our business to collect information and present it impartially and fearlessly to the public.

But the work in which we are engaged is surrounded by a great many difficulties. The limitations of the statistician's peculiar province are so great that after a wide practical experience, extending over sixteen years, I am sometimes somewhat discouraged. The lines of actual work are often so greatly limited and restricted that it seems impossible, sometimes, to secure the truth. Our business is then and under such circumstances, to do the best we can, and give nothing to the public but what has a sound and solid basis. The old saying is that "figures will not lie," but a new saying is "liars will figure." It is our duty, as practical statisticians, to prevent the liar from figuring; in other words, to prevent him from perverting the truth, in the interest of some theory he wishes to establish. We can only do this by being absolutely fair ourselves. But the limitations of which I speak almost prevent fairness and justice on the part of the statistician. It is the consideration of these limitations that leads me at this time, as the

most proper thing, to call your attention more specifically to the real object of our annual convention, which was to consider the difficulties surrounding the work of the bureaus.

You know that in past conventions we have taken up more or less time listening to papers on abstract subjects—all very valuable and very interesting, to be sure; but our work should be of a more practical nature, and it has seemed to the officers of this convention that a more valuable use of the greater part of the time here at Hartford would be in discussing the methods of statistical work, and all the limitations which surround it; the difficulties, in fact, which arise in the every day performance of our duties.

These limitations and difficulties surround almost every question that we have approached, or are likely to approach. They are felt more seriously in ascertaining the moral conditions which surround people or communities. Statistical presentations relating to moral conditions are likely to be misleading. For instance, suppose the good people of Hartford desire to be philanthropic, and they find that this year there are 2,000 people seeking employment; that the people are suffering from loss of organization. It leads to the organization of a charitable society for furnishing work to the unemployed, or for assisting them to find employment. The society finds at the close of the year that instead of 2,000 people being out of work there are but 1,500. At the end of the second year they find but 1,200; and at the end of the third year, 1,000. And then the society congratulates itself upon the great result of its work. Now, it may be true that they have actually accomplished nothing, and that a further examination of the situation would disclose the fact that industrial conditions have changed, markets been strengthened, and wages increased, thus increasing the opportunities for employment; and that these were the real reasons why the army of unemployed was reduced so rapidly.

I simply use this illustration to show that in ascertaining moral conditions two or more lines of facts are essential. It is the difficulty which the statistician often finds, and as often finds that he has made a mistake, by running on one line of investigation, and drawing the conclusion from that line, when parallel lines are absolutely essential in order to reach important results. The statistical failures come from the failure to recognize the necessity of different lines approaching a common center.

The limitations which surround the conclusion and presentation of the statistics of wages are very great. A few years ago many of our statisticians and economists thought there was one truth, at least, to be obtained from the census of the country. This supposed truth related to the average wages paid in the manufacturing industries, and was secured by dividing the aggregate amount of all wages paid by the total number of people among whom this aggregate amount of wages was supposed to be divided, the quotient representing the average wages, or earnings, of the whole body of people engaged in the manufacturing industries. The fact is, there is nothing more fallacious in the whole census than the quotient thus derived. The aggregate of wages paid, which constitutes the dividend, is positive, but the number of people, constituting the divisor, is far from being positive; in truth, it is very shifting. It is fluctuating, because the exact number of people that should constitute the divisor cannot be known. If you take the average number of people employed, that certainly makes a vicious divisor; if you take the largest number, or the smallest number,

your difficulty is still greater. If, therefore, the divisor is fluctuating and therefore vicious, your quotient has the same element. The question is asked in the census: "How many hands are there employed now? What is the amount paid?" The explanation is: "Give the greatest number of hands employed at any one time, and the least number at any one time; also the average number employed; also the number employed on a given date." Which of these numbers shall constitute the divisor? In censuses back of the present period, say ten or twenty years, only one question was asked: "Number of hands employed?" The modern census taker asks all three, greatest, least, and average, and perhaps adds the fourth, number employed at a given time; but I fail to understand how a quotient resulting from the use of either of the numbers as a divisor can possibly represent the average earnings of the people. The result is vicious, because it is fluctuating.

It is this that has brought various results for different decades of years. Without using exact figures, but with sufficient exactness to illustrate my point, the average earnings of the people at any one period may be shown to be \$400 per year, and at another \$370, and so the claim made that there has been a loss in the average earnings, while the exact truth may be just the reverse. And this may be the result of using a fluctuating divisor. So we have no right to draw conclusions that wages are either falling or rising from the use of any such material.

The difficulties I have spoken of constitute a very serious limitation that we should not forget. The only way to avoid the limitation, or rather the results of the limitation, is to fill out individually each account for each workman, from month to month, for a whole year. This method, the only true scientific one relative to earnings, absolutely precludes, on account of its tediousness, its adoption. The road is altogether too hard for any bureau to travel on to any great extent. I am trying it in the department of labor at Washington, in relation to railroad laborers, but even here the limitations prevent absolute completeness. The result, however, is far more satisfactory, for under such method facts are presented for representative conditions; and they are, to my mind, far better than the aggregate facts resulting from vicious details.

While at the head of the Massachusetts bureau of statistics of labor, another instance of statistical limitation came under my observation. This related to the statistics of prohibition and license. An investigation was directed into the number of arrests made for drunkenness during the years when prohibition prevailed, and during the years under license, respectively. Curiously enough, the result showed that for some places there were more arrests for drunkenness during the prohibitory years than under the license years. The statistics were worth but little, for this reason: The governments of cities are, as a rule, or at least used to be, quite opposed to prohibition, and the police officers, under the prohibitory rule, were generally very strict in making arrests for drunkenness; while under license fewer arrests were made.

The difficulties of treating any moral question statistically are very great. I have only cited some familiar cases that we may better understand our course of procedure. But the limitations show the value of our annual meeting to compare methods, to consult with each other as to means which can be adopted to overcome difficulties. The field for statistical work grows

wider, while the difficulties increase. Statistical limitations have prevented a line of investigation in this country of interest to, and in which the whole country is, or should be, interested, and that is one relating to the cost of producing articles which are manufactured in the United States and in countries abroad. At present there is no line of statistical information which will give us the cost of production for any great variety of articles. This state of affairs is to be regretted, and the chief reason why we have not at present such statistical information lies in the limitations which surround statistical work. Our consular service has for many years been engaged in this direction, but it has made but little progress, because in getting the cost of production consuls and consular agents have found that they could not overcome the difficulties which confronted them. And, again, they largely have undertaken to collect the information either by correspondence or by furnishing well prepared blanks to manufacturers in other countries. All such methods, for such a branch of statistical work, must inevitably meet with failure. There is only one way in which to secure the desired information, and that is by personal investigation. The manufacturer, as a rule, finds it impossible to observe the requirements of a great schedule, and they need, and are entitled to the assistance which an intelligent expert or special agent can offer. There are no offices in the country so well equipped for this class of work as the bureaus of labor. Some of the bureaus have attempted this cost of production investigation. It has been attempted with partial success by the department at Washington, and I am happy to inform you that in Italy, France, Belgium and Germany, as well as Great Britain, the cost of producing the cotton, wool, and iron and steel products, is being investigated on parallel lines with the investigation in this country, and that manufacturers in all the countries named are furnishing the information desired; grudgingly, perhaps, and in small quantities, but with a standard of accuracy which encourages me to believe that we shall, sooner or later, arrive at some valuable results.

With perseverance, with encouragement from legislatures, our bureaus can ascertain important facts and overcome limitations and difficulties which surround our peculiar work, and it is only by perseverance that we can ascertain great and important truths.

These remarks show in a suggestive way, the importance of our deliberations, and warrant our coming together once a year for the purpose of each member of the convention telling the whole body fairly and fully, and at length, the work upon which he is officially engaged, the difficulties which he encounters, and the methods he adopts to overcome them. This is our legitimate work as a body, and this I believe you are willing to take up as vigorously now as you have been disposed to in the past.

The secretary reported the following States having bureaus of labor statistics, with the names of the officers in charge, together with their post-office address:

Bureau of Labor, Washington, D. C. Established January 18, 1885; made a Department in 1887. Carroll D. Wright, Commissioner, Washington, D. C.

Bureau of Statistics of Labor of Massachusetts. Established June, 1869. Horace J. Wadlin, Chief, Boston, Massachusetts.

Bureau of Industrial Statistics of Pennsylvania. Established 1872. Prof. Albert S. Bolles, Chief, Harrisburg, Pennsylvania.

Bureau of Labor Statistics and Inspection of Missouri. Established 1876; enlarged 1883. Lee Meriwether, Commissioner, Jefferson City, Missouri.

Bureau of Labor Statistics of Ohio. Established 1877. A. D. Fassett, Commissioner, Columbus, Ohio.

Bureau of Statistics of Labor and Industries of New Jersey. Established March, 1878. James Bishop, Chief, Trenton, New Jersey.

Bureau of Labor Statistics of Illinois. Established 1879. John S. Lord, Secretary, Springfield, Illinois.

Bureau of Statistics of Indiana. William A. Peelle, Jr., Chief, Indianapolis, Indiana.

Bureau of Labor Statistics of New York. Established 1883. Charles F. Peck, Commissioner, Albany, New York.

Bureau of Labor Statistics of California. Established 1883. J. J. Tobin, Commissioner, San Francisco, California.

Bureau of Labor and Industrial Statistics of Michigan. Established March, 1883. Alfred H. Heath, Commissioner, Lansing, Michigan.

Bureau of Labor Statistics of Wisconsin. Established April, 1883. H. M. Stark, Commissioner, Madison, Wisconsin.

Bureau of Labor Statistics of Iowa. Established March, 1884. E. R. Hutchins, Commissioner, Des Moines, Iowa.

Bureau of Statistics of Labor of Maryland. Established 1884. Thomas C. Weeks, Chief, Baltimore, Maryland.

Bureau of Labor Statistics of Kansas. Established May, 1885. Frank H. Betton, Commissioner, Topeka, Kansas.

Bureau of Labor Statistics of Connecticut. Established April, 1885. Samuel M. Hotchkiss, Commissioner, Hartford, Connecticut.

Bureau of Labor Statistics of Maine. Established March, 1887. Samuel W. Matthews, Commissioner, Augusta, Maine.

Bureau of Labor Statistics of Minnesota. Established March, 1887. John Lamb, Commissioner, St. Paul, Minnesota.

Bureau of Labor Statistics of Colorado. Established March, 1887. Secretary of State *ex-officio* Commissioner; C. L. Driscoll, Deputy Commissioner, Denver, Colorado.

Bureau of Labor Statistics of North Carolina. Established March, 1887. J. F. Crowell, Commissioner, Raleigh, North Carolina.

* Bureau of Labor Statistics of Rhode Island. Established April, 1887. J. B. Bowditch, Commissioner, Providence, Rhode Island.

Bureau of Labor and Industrial Statistics of Nebraska. Established 1887. John Jenkins, Commissioner, Lincoln, Nebraska.

Upon calling the roll, the following was found to be present:

Carroll D. Wright, Commissioner of the National Bureau.

Horace J. Wadlin, Chief of the Massachusetts Bureau.

Prof. Albert S. Bolles, Chief of the Pennsylvania Bureau.

Lee Meriwether, Commissioner of the Missouri Bureau.

James Bishop, Chief of the New Jersey Bureau.

John S. Lord, Secretary of the Illinois Bureau.

E. J. Kean, Deputy Commissioner of the New York Bureau.

Alfred H. Heath, Commissioner of the Michigan Bureau.

H. M. Stark, Commissioner of the Wisconsin Bureau.

E. R. Hutchins, Commissioner of the Iowa Bureau.

* Almon K. Goodwin is the successor to Mr. Bowditch.

Frank H. Betton, Commissioner of the Kansas Bureau.

Samuel M. Hotchkiss, Commissioner of the Connecticut Bureau.

Samuel W. Matthews, Commissioner of the Maine Bureau.

John Lamb, Commissioner of the Minnesota Bureau.

J. F. Crowell, Deputy Commissioner of the North Carolina Bureau.

J. B. Bowditch, Commissioner of the Rhode Island Bureau.

John Jenkins, Commissioner of the Nebraska Bureau.

At this point the President called upon Prof. Arthur T. Hadley, of Connecticut, formerly commissioner of the bureau of that State, to address the convention. Prof. Hadley spoke as follows:

MR. CHAIRMAN AND GENTLEMEN—I am heartily glad to be present at this gathering, to renew old acquaintances and make new ones. When I compare the conditions today with those of three or four years ago, I think we may congratulate ourselves on the progress which has been made. At that time we ourselves knew little of methods of work, and the public had correspondingly little confidence in the results. The workman sometimes expressed an unwillingness to furnish statistics to anyone whose sympathies were not markedly on their side; and the employers, though they did not say the same thing, sometimes acted on the same principle. Today there is a great change for the better. All parties see that we use facts as facts, and that the question of sympathy ought not to be, and is not, thrust into the foreground.

I was glad to hear from Mr. Hotchkiss that the officers of the convention had not arranged to have a great many papers. However interesting outside addresses may be, that is not what we come here for. We come to compare experiences and get practical suggestions about methods of work. With our somewhat limited facilities we want to decide what to do, and co-operate with each other. We cannot try to do everything at once, comprehensively and thoroughly. There are some things which we can do comprehensively, making our investigations as wide as possible and trying to include every case. There are others where we select our instances for examination and look into each selected instance with the utmost care; cases which we make up by thoroughness what we lack in extensiveness. It seems to me that in the division of work between the National and State bureaus, to which Col. Wright has alluded, the extensive work may tend more and more to fall into the hands of the former, and the thorough study of individual returns to the latter. But it does not become me to give advice. Your own experience of the last two years has taught you more than any possible suggestions from me could be worth. I can only close as I began, with an expression of pleasure at meeting you, and congratulation on the progress which your work has made.

United States Senator Joseph R. Hawley, of Hartford, Connecticut, being introduced, said:

I certainly did not mean to make any suggestions as to the nature and manner of your work, and I would rather not present my criticism until after you are through. I am not sufficiently posted in the work of the bureaus to criticise it as a whole or individually. While I fully recognize all the chairman has said to be true, I believe it is absolutely necessary to be cautious against placing implicit confidence in the bare figures of statistics. They must be studied with a knowledge of the impossibility of thoroughly collecting them. Whether absolutely correct or not, one sometimes

finds them as fascinating as romances. Take, for instance, the scope and variety of Mulhall's various works, the Dictionary of Statistics; certainly that is an exceedingly interesting and instructive book. It presents prices of commodities, the wages received in various countries, the number of men employed in various kinds of work, and the hours of work, etc. He has decidedly disclosed the fact that the American workman is the most productive, man for man, because he is better fed, clothed, housed, paid and educated than those in any other country. It might be added that there is another element that cannot be told in figures or labor statistics, and that is the hope and assurance of the wage-earner that, if he will, he may better himself. It gives great pleasure to studious men to see the advancement made by these organizations toward better statistical work, and I have no doubt their labor will result in advancing social and economic interests.

So, gentlemen, while I agree with the chairman in regard to these limitations in furthering this work, I am satisfied from these discussions great good will come, and I prefer to listen to others and afterward criticise them, if it be possible.

United States Senator O. H. Platt, of Meriden, Connecticut, being called upon, said:

MR. CHAIRMAN—I am glad to be here for two reasons: and the first is, because I am deeply interested in the work which the gentlemen composing this convention have in hand. It is not a new-born interest, for all through my life I have felt that the value of labor as a factor in the great problem of development was, if not overlooked, largely unappreciated.

I have noticed the establishment and organization of labor bureaus in the different States with great satisfaction, and have been gratified with the progress made by them in ascertaining and giving to the public accurate facts and figures, calculated to awaken in the popular mind a greater interest in the welfare, happiness and progress of the men who are doing the world's work. It seems to me that, satisfactory as the work already accomplished is, it has just begun. The gentlemen who have met here today, representing their organizations in the different States, are in the highest sense educators. The public are pupils, and have scarcely progressed beyond the primary stage in learning the lessons taught by the statistical information which is being collected and published. I look for great advancement both in the teaching and the learning of the facts calculated to improve, not only the material interests of the country, but also the condition and welfare of its citizens.

The other reason why I am glad to be here is this: I desire myself to learn all that may be learned from the deliberations of the convention. My interests in this branch of social science is necessarily but that of an amateur; and you, gentlemen, who have made a special study of the relations of labor to capital, and of both labor and capital production, can, any one of you, instruct me. I am glad, therefore, to come here today as a learner.

I have sometimes felt that, in the agitation which has characterized the newly awakened interest in labor and laborers, we were all, to some extent, overlooking the great idea which underlies this agitation. We see the evidences of discontent; we read of strikes and controversies, and violence at times; we feel that there is a contest, and we cannot always wholly approve the conduct of the contestants on either side. These surface events attract our attention, and sometimes we become alarmed at what seems to be a dan-

gerous conflict between classes of our people—between capitalists on the one side and laborers on the other. But if we look deeper than the surface, I think that we shall see that a great movement for the uplifting of humanity is in progress the world over; that if discontent exists among the common people, it is but the evidence of an aspiration for better things; of an aspiration which ought to be and must be satisfied.

I am not one of those who believe that humanity is being degraded in the world. I believe that the people as a mass are growing wiser, better, happier and are coming to a more perfect understanding of their rights, duties and responsibilities. The disagreeable symptoms which shock and alarm our pessimistic friends, seem to me to indicate, not decay or deterioration, but healthy and vigorous life. The truth, as I read it, is, that the common people are coming to understand their rights and their duties, and are determined to enjoy the one and perform the other. Mistakes they will undoubtedly make, but out of all the agitation and contest they will reach a higher plane in social, moral and political life.

The very theory of our government requires a recognition of the dignity of labor and the worth of the laborer. In a country where the vast majority of men labor with their hands, democracy is impossible unless each laborer counts as an equal unit in the problem of government; and this is possible only where the laborer is fairly treated, justly appreciated, and honestly discharges the responsibilities which a republican form of government puts upon him. To put it in more practical words: A republican government is a government by all the people. Each one who participates must be the equal of every other one. The rights of the laborer must not be subordinate to the rights of the idler. A glance at the world's events must satisfy anyone that the common, humble people of the world are coming to understand this, and, whether under a republican or monarchical government, are aspiring to become real factors in all problems of human life.

What we call the "labor movement" is after all but a new development of the passion of mankind for liberty. And whatever the strife or contention, whatever the mistakes or blunderings, which may attend this development, the outcome is sure to be a higher and nobler liberty for mankind. We all ought to welcome this. I rejoice in it, not in the wrongs that may be perpetrated in securing this liberty, but in the result that is sure to be accomplished. If there is danger, safety is to be found in knowledge. With accurate information as to the respective relations which capital and labor sustain to production, we shall have less of contention and strife. It is easy for the man who labors, to think that he alone produces; it is easy for the capitalist to think that capital is the greatest factor in production, and that labor plays only a subordinate part. But when the facts which you, gentlemen, are engaged in ascertaining, shall be generally known and understood, the true relations of capital and labor will come to be thoroughly apprehended. It will be found that both are essential to production and progress, and that neither can dispense with or despise the other. Money will no longer exalt its possessor, nor manual labor degrade him who performs it. The laborer and the capitalist must, and when this subject is understood, will meet on the common ground of manhood, each understanding the part he has to perform in the world's progress and in human advancement. As the importance of the work you have in hand comes to be better understood, it will be more universally appreciated.

When labor bureaus were first established, I think it may have been felt by some that they were merely a concession to a troublesome class of our citizens. But we "builided better than we knew." They were the need of the century, and that fact is coming to be fully recognized. As investigators, you occupy a position second in importance to none, and your responsibility is consequently great. What we, who cannot spend the time to investigate, wish to know is exact truth. We do not wish to be fed with speculation, but with cold, unimpeachable facts. Your work will be slow, your labors difficult, and oftentimes discouraging, but the fruits of your labor well performed will be ample and satisfactory. Like the leaves of that tree planted by the river of life, your conclusions are to be for the "healing of the nations."

I am glad, therefore, to welcome you to Connecticut, to the State in which, I think, labor has been as highly respected and appreciated as in any State in the Union. I trust that your stay here will be made pleasant; I know it will be valuable to us. I am glad to make the acquaintance of the delegates; and I hope that when you leave us, it will be with a feeling that Connecticut has been hospitable, and has appreciated the honor of your gathering here.

Mr. Frank H. Betton, of Kansas, moved that a special committee of three be appointed by the chair to nominate officers of the association for the ensuing year.

Mr. Frank H. Betton, of Kansas; Mr. J. F. Crowell, of North Carolina, and Mr. John Jenkins, of Nebraska, were appointed members of that committee.

Col. E. R. Hutchins, of Des Moines, Iowa, stated that at an informal meeting this morning, at which were present a large number of gentlemen, who are now here, a ballot was taken and a majority favored Des Moines, Iowa, as the place for the next meeting. I take a great deal of pleasure in naming my own city and State for the next convention. We have not as many interesting things as they have in Hartford, but we have a typical western city with the best type of citizenship who will gladly welcome you, and I cordially invite the convention to meet at Des Moines, Iowa.

Mr. J. F. Crowell, of North Carolina, carrying out the idea of the informal meeting, moved that the Eighth National Convention of the Bureaus of Labor Statistics, be held in Des Moines, Iowa, in 1890.

Mr. Alfred H. Heath, of Michigan, seconded the nomination, and it was unanimously carried.

The committee of three then brought in the following report of officers for the ensuing year: President, Carroll D. Wright, of Washington, D. C.; Vice-president, Samuel M. Hotchkiss, of Hartford, Connecticut; Secretary and Treasurer, E. R. Hutchins, of Des Moines, Iowa.

Upon motion of Mr. H. M. Stark, of Wisconsin, the report of the committee was adopted, and he further moved that the secretary cast the ballot of the convention for the above mentioned gentlemen as officers for the ensuing year. The motion was carried, and the secretary obeyed the instructions.

It was voted that the sessions of the convention be from 9:30 to 12; 2 to 5; and 8 to 10 o'clock each day.

President Wright announced that the desire of the convention was to hear reports from the different bureaus as to the lines of work in which they were engaged, and asked the secretary to call the roll for this purpose.

UNITED STATES DEPARTMENT OF LABOR—PRESIDENT CARROLL D. WRIGHT.

The Department of Labor at Washington is at present engaged in four matters—

First, The finishing of the report upon working-women in great cities. This work is now through the press and will be ready in a few weeks for distribution. It consists of about 550 pages, and embraces the statistics surrounding the conditions of the working-women in twenty-one of the larger cities of the Union.

Second, The department is completing a special report upon the statistics of marriage and divorce. This report was laid before congress at the close of the last session, and is now about two-thirds in type, and will be ready for publication later in the summer. It is an important work, and one of the most scientific in which I have ever had the pleasure of being engaged. It covers the subject of marriage and divorce statistically for a period of twenty years, and so far as divorce alone is concerned will suffice as an accurate count. It will also serve as an authority on the laws of marriage and divorce as they exist in the various States of this country and Europe. The marriage statistics are not as complete as those relating to divorce, on account of the lack of registration in various States.

Many difficulties surrounded the preparation of this special report. It was undertaken in obedience to a request from congress, which furnished the means. It was necessary that the investigation should cover a long period, certainly not less than two decades of years, for the statistics of any one year would not give information which could be used in a comparative way. The period selected was from 1866 to 1886, inclusive. It was necessary to examine every libel of divorce in the whole country for this period of twenty years, and to examine every docket entry. This was done by the agents of the department, and in some cases by the clerks of courts, the results for each divorce case being entered upon a single sheet or schedule. The single sheet or single schedule method was adopted for the purpose of simplifying the work of tabulation. Upon this schedule all the facts relating to each case of divorce, as I have said, were entered: where the parties were married, where divorced, when married and when divorced, the cause, and, in fact, all the facts that the limits of the libel would allow. It must be remembered that there are in round numbers 2,700 courts in the United States having jurisdiction in divorce cases; so the difficulties encountered can be imagined. In brief, the magnitude of the work is represented by the libels, the evidence, and all docket entries of all divorce cases as recorded in 2,700 courts for the period of twenty years. The results are reported by detail in various ways, so that the questions relating to duration of marriage, causes, etc., are easily ascertainable, not only by States, but in other forms of presentation. The department has had nothing to do with the question as to whether divorce laws should or should not be amended, nor, in fact, undertaken to solve divorce problems. It has simply collected, faithfully and fully, all the possible statistics relative to marriage and divorce. The difficulties and limitations surrounding the preparation of this report on marriage and divorce are so fully and clearly described in the report itself that I know you will prefer to examine them in print to listening to them as I might detail them here.

Third, The department is engaged in collecting the statistics concerning

railroad labor. This investigation is divided into two parts. Representative roads are called upon to furnish all the facts relating to general conditions, organization, capital, and the statistics which supply information as to beneficiary organizations or efforts, and everything, in fact, of a general nature. This constitutes a very interesting and valuable part of the investigation, and one that is conducted without any special difficulty. The main part of the investigation relates to the actual earnings of the railroad laborers in the country. It is very easy to obtain two facts: the aggregate wages paid by all the railroads in the United States and the total number of people employed at any given time. This would satisfy many economists; but it involves the old question, to which I reverted in my opening remarks, of the positive dividend with the fluctuating divisor, the result being a vicious quotient, which would be used to represent the average earnings of the railroad employes of the country. We have avoided this by the only way which can be adopted to secure positive and truthful results, and this method involves the collection of the facts for each individual employé for a sufficiently large number to represent the whole. In railroad labor, more than in any other, it is found that very many employes are temporary, working only for a week or two, or may be a month. Now, each one of these temporary employes enter into the total number of persons employed, and the pay they receive enters into the total of wages paid of the whole number. The department is endeavoring to carry out each case individually, finding the actual time employed and the actual money received in wages. This will show the lost time in railroad labor. By the process adopted, that is, of individualizing account, the department secures an absolute presentation of the earnings of the employes of railroads on a classified basis, using also, of course, the average. I mean by classified basis that which enters into a total showing how many men earn one dollar per day, how many two dollars, how many work a certain number of days, etc., instead of the general average usually employed. This method has been adopted by some of our bureaus, notably that of Connecticut and that of Massachusetts, and you will find in the last annual report of the former State, and in a forthcoming report on the census of Massachusetts, relating to manufactures of that State, the whole matter of classified wages clearly exemplified. The field work connected with railroad labor is practically complete, and the force in the office is now engaged in making the tabulations, so that the full report will be sent to congress at the proper time in the autumn.

Fourth, Another investigation being conducted by our department at the present time relates to the cost of production. In the organic law of the department there is a clause directing the commissioner of labor to investigate the cost of producing articles upon which duties are laid, the object being to secure the cost of producing such articles not only in this country but in those countries abroad which manufacture the same. In obedience to this instruction the work of the present investigation was commenced last December. It is carried on by means of systematic schedules, used by special agents and experts. These schedules, however, are never left in the hands of the producer. The work has been limited purposely to three lines, cotton, iron, and wool. The agents are instructed to secure samples of products, and the aim is to gather information for comparative purposes, and this necessitates the use of the same grade of goods as a basis in each country for each industry. The difficulties which surround such an investi-

gation are great indeed. There is, of course, opposition on the part of producers. There would be no such opposition if the investigation was limited to the United States, because the manufacturers of this country are quite ready to give information relating to the conditions which surround production. It is quite a different matter when you ask the American manufacturer to give facts concerning the production of his goods for the purpose of putting them alongside the facts to be furnished by European manufacturers. On the other hand, the European manufacturer feels that when we have asked him for the facts concerning the productions of his wares, so that they may be printed side by side with those furnished by the American, a great favor has been asked of him, and he sometimes feels that there is unlimited "cheek" in the proposition. This difficulty, which is only one, and arises in the natural order of things, was fully anticipated. So, the first step that was taken by the department was to consult leading American manufacturers and to inform them that we proposed to publish information concerning the different productions in America and Europe, and in several cases, sufficient for our purpose, our experts were informed that if we could secure the information from abroad, the same line of information should be forthcoming on the American side, and manufacturers helped us to classify the information to be collected, in the formulation of questions and in supplying technical terms, which were of great use to the department. With this preliminary support, our agents were sent to Europe, and were given full instructions in accordance with the information which had been secured. European manufacturers have been informed that if they would give information from their side, the American manufacturer had promised to respond. The result has been that the investigation has succeeded in Europe as well as in America, and some of the largest manufacturers in either country have freely opened their books to our inspection. In France, and in other parts of the Continent, and in Great Britain, our agents have received sufficient information to enable them to state positively that the experiment is a success. Schedules were prepared with great care, and so arranged that it is difficult for a producer to deceive the department.

Alongside of the cost of producing articles we secure the cost of living of the men and women who make the goods under consideration, and their earnings are also secured in the same way in which we are collecting the earnings of the railroad employés of this country. This will enable the department to present the wages question in the report on the cost of production with classified results.

While the investigation in question must at present be considered tentative in its character, I think it will, when complete, give strength to statistical work and secure the confidence of the public, because it will give very positive evidence as to the cost of producing goods in different countries as compared with the elements of production in our own States. The report will help the workingmen to understand more fully than they could by other lines of facts the real conditions which surround the industries of the two continents, and it will help congress in its deliberations relative to the cost of different articles. The latter, of course, is the main object of the investigation.

Most of the members of the convention will remember that at our meeting in Boston, Professor Atwater, of Connecticut, presented an interesting

and valuable paper on "Food Consumption." It is probably true that the quality of food used in different countries has much to do with the cost of production; so I have hopes of being able, sooner or later, to accompany the investigations relative to the cost of production with facts concerning the classes or grades of food use by operatives in various countries. It is probably true that the English cotton operative, when brought to America, produces a much larger quantity for the time employed than when he worked in his own home. This is only one of the features that surround production; but there must be a reason for this increased production, and this reason must be found. The laws relating to some of the features of production must be ascertained, all the underlying facts learned, and when we have learned the truth, as it will ultimately present itself through investigation, then may come some solutions which are now anticipated.

At the close of this report a recess was taken until the evening session.

MASSACHUSETTS—MR. HORACE G. WADLIN.

We are at present engaged in pushing through the press the final volume of the decennial census of the State, taken in 1885. This volume will be published about August first. We also have in hand the 19th Annual Report of the Bureau, which will consist of two parts. The first relating to "Strikes and Lockouts," from 1881 to 1886, will be based upon data for which we are indebted to the U. S. Commissioner of Labor. It supplements the historical and statistical account of strikes in Massachusetts down to 1880, previously published by the bureau.

The second part will relate to "Citizens and Aliens," and will present a valuable consideration of the influence upon citizenship of the immigration due to the industrial development of the State. We also have the 20th report well advanced. The chief parts will relate to "Wages and the Cost of Production;" markets open to the sale of Massachusetts products and means of transportation thereto; and the conditions of operatives in their homes and employments.

The bureau has since 1886 taken, under a special statute, Annual Statistics of Manufacturers, relating to the five leading points of production, namely: wages paid; persons employed; stock used; goods made; and capital invested. The publication of these annual volumes has been delayed by the work involved in the completion of the decennial census. The results for 1886 and 1887 have been prepared for the press, and will be published in one volume, the first of the series, early in August, and will be followed in a few months by the volume for 1888.

Meantime we have under consideration other subjects of investigation, which, however, are not sufficiently advanced for public announcement.

PENNSYLVANIA—PROF. ALBERT S. BOLLES.

My report will relate to the building and loan associations in my State, and to miners' earnings. Pennsylvania has a larger number of these associations than any other State in the Union, and an elaborate investigation has been made of their operations. A gentleman who is secretary of a large number of them has performed the work. Returns were obtained, which we consider quite satisfactory, considering the great difficulties in the way of

getting them. One of the difficulties in preparing the information for the public was to tabulate the accounts. Since completing the report, the associations have been so much pleased with it that, during another year, the bureau will doubtless be able to get reports from nearly all of the associations in the State.

A few explanations concerning the earnings of miners may be of value. To learn that a miner gets enough to live comfortably will be a surprise to some people, but it is true in Pennsylvania. The general impression is that he is the most poorly paid of any kind of workingman. There are ninety thousand miners in the State. My method of collecting the earnings of miners may be briefly described.

I had a blank prepared and sent to each colliery. In these blanks were to be put the earnings of ten men who were paid the largest sums during the year, and also the earnings of ten men, who probably worked just as faithfully, but who were the least paid; in other words, the earnings of the most skillful and the least skillful were desired. I have returns from collieries in which over thirty thousand miners are employed, and from which I can answer the chief questions for which the inquiry was undertaken. I can show how much a miner can earn for a year by giving his earnings for that period.

I may say, in closing, that when I accepted the office, two years ago, there was no means of collecting information except by blanks—no special agents; but the last legislature was wise enough to provide for the appointment of two agents to gather statistics, so that we shall soon be prepared to collect them more fully.

Not much has been said concerning the work of the bureau in our State, though one of the oldest of them all. The people, however, are awakening to an interest in the matter.

MISSOURI—MR. LEE MERIWETHER.

I have but recently entered upon the duties of my office and am, therefore, unable to give much information as to the investigations of the Missouri Bureau of Labor Statistics. This much, however, I have learned even in the short time that I have been in the office, viz.: that the work of the labor commissioner is as much that of an inspector as of commissioner. In fact, our office is officially called the Bureau of Labor Statistics and Inspection, and the labor commissioner is required to have every mine in the State inspected twice each year. Owing to the short time at my command, our next report will be limited to a report upon the inspection of coal, lead, zinc, iron and granite mines. The plan of work is not yet definitely arranged, but the report will endeavor to show the actual condition of miners in Missouri, their yearly earnings and their yearly expenses, their moral and social condition, and the general condition of the mines, the out-put for the year, etc. The commissioner from Pennsylvania states that his plan in securing similar information from the mines is to obtain, for instance, the wages of miners from the pay-rolls. This plan has suggested itself to me, but it has been my experience that the pay-rolls cannot always be relied upon to give an accurate idea of the earnings of the individual miners. For instance, John Smith may appear upon the pay-rolls as receiving \$100 for work rendered as a miner during the month of January, while as a matter of fact,

John Smith had, perhaps, two grown sons or assistants working with him who shared the \$100. How can we get at the amount that John Smith earned as his individual wage?

Regarding the inspection of factories, how is it possible to ascertain whether or not children under the legal age are working, when both the manufacturer and the parents of the children agree in declaring that the child is of legal age? In questioning the parents as to the age of their children working in factories, I have sometimes had them laughingly ask: "Do you mean their real age or their factory age?" Their factory age is generally anywhere from one to three years more than their real age.

NEW JERSEY—MR. JAMES BISHOP.

In compliance with the request made at the last meeting of the national convention, copies of all the blanks intended for use in the preparation of the eleventh annual report of the New Jersey bureau were sent to each of the commissioners.

In that report the subject of railroad casualties was taken up, particularly to employés, and of the relief associations, now coming into fashion, which have received considerable attention of late years both here and abroad. In connection therewith will be discussed the changes which recent legislation, in this country and in Europe, has effected in the old common-law rule of employer's liability. These so-called employer's liability laws, in force at present in only a few of our States, primarily affect the relation between railroad employers and employés.

The fifth census of the building and loan association will occupy a large part of the report, and give some very interesting information about those valuable co-operative enterprises which are increasing rapidly, both in influence and number, and of which there are over 200 in the State.

The subject of wage statistics will be, as usual, one of the leading features of the report and tabulations are to be made showing the earnings and cost of living of our working classes.

ILLINOIS—MR. J. S. LORD.

The Illinois bureau has just completed and published its fifth biennial report, and has not as yet fully determined upon the special line of investigation to be taken up during the ensuing year.

Since I last had the pleasure of meeting the members of this convention, the bureau of Illinois has been engaged in pursuing several inquiries, the results of which have been published in two reports. In the former there was rather a full consideration of the subject of convict labor, under the contract system, as affecting the wages and profits of honest men in Illinois and elsewhere, and in the preparation of which the statistics of prisons in all parts of the country were taken and analyzed with reference to their bearing on the contract and other systems of penal labor.

This report was timely in its appearance, as a proposition to abolish the contract system in the penitentiaries of Illinois was then being submitted to the people for consideration, and information on the subject was desired by all classes. The vote upon the question resulted in the adoption of an

amendment to the constitution of Illinois prohibiting the further contracting of convict labor.

About this time the leading feature of the labor movement was the rapid and then recent development of labor organizations, both in our State and in the country. As there was then much interest, and equal uncertainty, felt as to the real proportions of the movement toward organization and the motives and aims underlying it, the bureau undertook a census of all trade and labor organizations in Illinois and an inquiry into their growth, objects and potency. In the same study advantage was taken of the opportunity thus presented, to secure through these organizations, statistics of the wages and economic relations of the membership.

It must be said that the bureau did not encounter as much distrust and objection from the organizations themselves in the pursuit of this investigation as was freely predicted and fairly expected. The officers of the trade and labor societies, for the most part, responded to our special agents with candor and placed many facts of great value, and hitherto inaccessible, in the hands of the bureau. This made possible a compilation of statistics relating to labor organizations in Illinois unique in character and comprehensive in scope. It covered not only an enumeration and classification of the membership on the lines of their occupations, nationalities and distribution, but a record of the experience of nearly 90,000 workmen in the matter of wages, working time and wage payments, strikes, the proportion of married and single, of home-owners and renters, of employed and unemployed, their efforts at co-operation, etc.

Another subject which has engaged the attention of the bureau is the practice in certain factories, shops and stores of imposing fines upon employes for trivial offenses, created by arbitrary rules. These rules are justified on the ground that they are necessary to the maintenance of discipline and the fines are justified as the easiest method of enforcing them. In effect, the levying of a fine constitutes an infringement upon the stipulated wages and is equivalent to a seizure by force of money already earned. In effect, also, these fines, though each be a small amount in itself, when aggregated in a large establishment, constitute a considerable sum to the credit of the firm, for which no equivalent is rendered. Although the practice was found to be by no means general and was openly condemned by the better class of employers, it was still found in active and oppressive operation in a sufficient number of establishments to justify the attention given the subject by the bureau.

During the last session of our legislature a bill was introduced, one clause of which was intended to prohibit deductions of this character from the wages of the poor. It was favorably considered and passed by the lower house, and was twice read and approved by the senate, though, greatly to the regret of many, it was not reached for final action prior to adjournment.

The most recent work of the bureau has been an attempt to arrive at the private indebtedness of all the people, as shown by the records of mortgages. This line of inquiry especially commended itself to the bureau in consideration of the fact that no compilation of the private debt, as distinguished from the volume of public debt, had ever been attempted; that many of the advocates of industrial reform regarded this subject as fundamental to a proper discussion of the wages question; that aside from its value in economic discussion, it would afford many indices of actual condition

among classes, and to those who are chiefly interested in the question of the solvency of the people it would develop the relation which these liabilities sustained to the actual values of property.

The work was undertaken with full understanding of the difficulties which the case presented, and of the limitations which were to be encountered. Accepting these it was still found to be entirely feasible to present totals which were substantially true in all respects and entirely true for all purposes of comparison, either as to given localities or the three periods of time considered. This report has recently been placed in the hands of the gentlemen present and it is unnecessary to enlarge upon its character.

In addition to the regular biennial publications mentioned, it has devolved upon the bureau, through the creation of a State mine inspection service, to make annual compilations and reports of the current statistics of the coal industry in Illinois. The basis for these reports is found in the annual reports of the inspectors of mines to the bureau, and the effort is made to arrive at and present, not only the facts as to the production, but equally the details of wages and condition among the coal miners.

NEW YORK.

Mr. Edward J. Kean, chief clerk of the bureau of statistics of labor of that State, said:

The main purpose of the inquiry for the year, from November, 1887, to November, 1888, was to get as full and exact information as possible of the rates of wages during the five years, 1883 to 1887, inclusive, with their fluctuations and the causes of change. The inquiry also included hours of labor and number of employés. An inquiry paper was sent out to the several labor unions, with five questions, as to rates of wage, hours of work (especially on Saturday), and effect of organization. It also invited remarks on topics of interest.

A form of inquiry of kindred purpose, but differently worded, was sent far and wide to employers, asking for detailed information as to wages, causes of rise or fall, and numbers and classes of employés, etc.

These blanks, over 20,000 in number, were issued to labor unions in the State, and to all important labor employers. These inquiries, it may be observed, were outside of, and in addition to the inquiries into strikes and labor movements, which have formed part of the bureau's regular work since its establishment; the form and tenor of which can be at once seen in all its specific minuteness and general amplitude by the form of inquiry No. 3.

The returns from unions and employers have been far more full than was expected from such an experiment. The whole course and tendency of wage rates have been shown; a great number of reasons for "change" or "no change" have been furnished, which, as they are largely based on individual experience, exhibit much variety of opinion. Some of these replies are personal; others take a wider range.

The compilation of these returns and their reduction into tabular form may be of interest to those who care for business details. As the several returns came in they were classified under headings. In many cases not only the same thought but the same form of expression would strike many individuals. A simple "yes" or "no" is easily reached and recorded. But

in a long series of answers to questions that appeal to personal experience there was necessarily considerable variety. The answers were tabulated under the letters of the alphabet, as A, B, C, D, etc., or with variation, as AB, AC, AD, etc. Thus the sentiment was retained even if the form of expression should vary. Question No. 1, as to wages, "higher or lower," and "reduction of hours," involved eighty-five different classifications. No. 2, "reasons for change," compelled a classification in eighty-six forms, covering both the plus and minus problem.

The same process used for the employers was repeated for the employés. Thus the effect of organization admitted of the categorical answer "yes" or "no," but a large number gave a qualified answer, with reasons as the basis of conviction. The "increase due to organization" replies represented a constituency of 114,218 workers.

The answers A, B, C, etc., were tabulated by means of tally sheets with corresponding characters. These answers can also be counted by using trays or paper boxes with characters similar to those on the blanks. A clerk can pass between and around two ordinary tables and fill the trays, or boxes, with the blanks. It is an easy matter to count each class of answers as the separation is complete. Should there be large quantities, each class could be rapidly counted by straightening the blanks and taking a quantity by one end between the thumb and forefinger of the right hand and giving it a slight twist; this will cause the blanks to spread out in the shape of a fan at the other end, and they can be counted by twos, threes, fours, fives or tens by using the thumb of the left hand, and the total reached in a short time.

The wages returns were classified and tabulated by a simple process. A copy was made of each return with alternating blank lines. These were cut up in slips and each class was easily assorted. Thus if a firm reported that it employed twenty-five carpenters at \$3.25 per day, and the working hours were ten for the first five days of the week and nine on Saturday, it was easily separated from the firms which paid the same rate per day but only worked their employés nine hours for the first five days and eight on Saturday. It made no difference how many classes of workers were on the blank returned, or how many terms to indicate these classes were used. When a division by counties was desired, the name of the county was repeated on the blank alternating line, and its appearance on the slip, when cut, made such a division easy; after these slips were placed in their respective classes and divisions they were pasted on sheets of paper, beginning with the lowest rate paid, and preserving the most perfect and minute classification of wages rates and the number of working hours. This method has the still further advantage of making the copy for the printer while making the tabulation, thus combining economy with exactness of details. The economy can be still further extended by the use of specially prepared blanks with perforated lines, which would permit of each class being quickly separated, like the system of coupon tickets used by railroad companies. This would require exactness on the part of the enumerator or special agent. If this was secured, a perfect photograph of the information furnished could be given.

The various printed circular forms were sent "prepaid," with a return envelope, to employers selected from the directories, and specifically to officers of unions. Many of the first applications failed, but an alphabetical list of all the parties notified having been kept, it was easy to check off the receipts, and to call up those who had forgotten to reply.

This detail kept the clerical force of the bureau busy. It was satisfactory that the default of reply was in a great majority of cases a simple act of omission, and not an intentional "kick." Sometimes, indeed, the bureau itself was unintentionally at fault, through the duplication of a firm under different headings. In this matter postage stamps were used by thousands.

Three questions were propounded to employers, as follows:

1. Is the prevailing rate of wages, among men in your trade, higher or lower than it was in 1883, five years ago?

2. To what do you attribute the change if any?

3. How many, if any times, have you increased the rate of wages, or reduced the number of hours, of the men in your employ during the past five years, as the result of a request or demand on their part?

About 20,000 of these inquiries were issued. The answers have come in numerously, and have been remarkable for their variety. In tabulating them, the question No. 1, "higher or lower wages and reduction of hours," embraces no less than eighty-five distinct classifications. A frequent answer was: "Wages increased one or more times, by request, not on demand." (This, it might be observed, is not in accordance with the statements made by employes, who more generally ascribe raises in wages either to strikes, or expectations of strike.) The ratio of advance in wages extends all the way from 5 per cent to 25 per cent where figures are given; the majority of employers limiting the answers to the fact of an increase. Some employers take credit for increase to an infinite extent; the fact being that a large number of employes are juveniles, who are raised from time to time according to their advance in skill or the amount of work accomplished.

Employes' or labor unions' returns, while deprecating strikes and admitting the unfavorable results that sometimes follow these crude attempts to settle the vexed question of wages, make return that in the majority of cases, a raise in wages has been the specific result of a strike.

Sometimes an advance has resulted from sympathy with strikes in other establishments, which have operated as a warning. It may be assumed that the example of a large employer making a concession would have its influence throughout the trade.

To question No 2, "The reason for change," the replies are still more various than as to the fact of change, and go to show the variable factors in the wage figures. We have here no less than eighty-six distinct classes of answers.

Among them we have "Competition," either in the ups and downs of trade itself or in the willingness of wage-workers (immigrants or men out of employment) to accept what they can get. On the advance side, we have "Wealth and general prosperity;" "Brisk trade," under various names; "Merits of the employes;" "Labor unions and organizations;" "Strikes and peremptory demands;" "Demand for skilled labor;" "Lower price for raw material which always helps labor;" "General advance in everything;" "To our men becoming more skillful and to improved modes of manufacture, less men being necessary to do the same amount of work"—(this is worthy of special note as meaning that machine-production benefits the machine operator, but not the wage-earner); "Costs them" (operators) "more to live;" "Shorter days and demand for help;" "High tariff" (says one person); "National growth of the country, more intelligence in employes, improved method of doing work"—(this answer would seem to

work both ways); "Give it up, unless generosity will explain it;" "Prices of manufactured good are 10 to 20 per cent lower;" "Change in administration, solid financial basis;" "Better goods;" "Trade unions and education;" "Employés are bound to have all there is in the business, and they are getting it;" (This pessimistic answer is offset by the next): "Increased skill, unions, demand, scarcity of good help, and good currency and good time."

The same question involves the causes of low wages, which are equally various, and if seemingly irreconcilable in principle are true in special cases. "Competition;" "Free importation of our article" accounts for a decline in local manufacture; "Machine work;" "Convict labor;" "Imported labor" (of which we hear a good deal both on the basis of pauper labor, and of skilled labor coming over to do season work and go back again); "Depression in trade;" "Tariff depression"—(presumably meaning uncertainty in the future); "Our supply of labor"—(another protest against immigration); "Slow but gradual receding from high prices obtained during the war;" "Dry goods and upholsterers, tailors and women"—(seems an ebullition of morbid feelings); "Undervaluation of imported goods;" "Over production." One individual replies, "Trying to run Government in Canadian and British interests;" "Wrong classification of tariff;" "Taking inferior help from other trades;" "Low tariff;" "Falling off in railroad building" is the cause assigned by a machanic, while "increase in railroad building" explains the prosperity of a supply contractor. One man objects to "European competition," while another wants "Five per cent protection instead of fifty per cent protection," and a third suggests "Senseless competition a free trade scare." "Lower prices on work" implies that cheap contracts are at the loss of the wage-worker. "High tariff on raw material and formation of trusts" is the cause of low wages according to one employer, while another omits the tariff and confines himself to "Combinations and trusts."

As to the actual changes in wage-rates, the returns seem almost as various as those upon "causes." But many have thoughtlessly or carelessly omitted to record the very facts intended to be covered by the inquiry. As to the quality or extent of change, we have sixty-three distinct kinds of replies, embracing the simple "lower" or "higher" and "no change," with other generalities; also "twenty-five per cent less," presumably per day, fifty per cent being the greatest reduction. The majority of the returns deal rather with percentages than with specific figures, ranging from "four per cent lower to fifty per cent lower" and from "slightly higher" to "five per cent, ten per cent, thirty-five per cent, and fifty per cent higher." One return gives \$12.60 as the average weekly wages of 1883, advanced in 1888 to \$13.90. Another says, "Higher rate but lower average." Yet another says, "Same wages, less time; making higher pay."

Among other facts disclosed by the investigation, it was shown that in labor inquiries wages are the distinctively crucial issue. Price of the raw commodity turns on wages, so with the perfected product allowing for the landlord's rent, all that comes after is wages.

The vast majority of mankind must earn "wages" to live. The amount needed for subsistence is scarcely a factor, except for philanthropists or poor-house boards. The sum payable is determined by a number of causes, commercial, local and personal. When we ask what regulates wage-rates, it

is pretty safe to say "Supply and demand." This is generic, however, and calls for some comment in explanation.

Trades unions are, as we all know, potential factors in fixing nominal rates. The value of their interference is, however, modified by the state of trade, general or local.

The efficiency of the worker has also to be taken into account. Formerly an employer might pick out a man of unusual merit, and give him an unusual rate; but such a practice is no longer favored. The unions think a regular wage for all is a better guarantee for the body of workers than the capricious or interested liberality of the employer. They prefer uniformity.

In a broad sense it may be assumed that what will support one man will support another. This, however, is only applicable to the feeding of men in masses; soldiers, sailors, public institutions, etc. In business calculations, the wants of the worker are not taken into the account.

The ruling rate of wages is made up from a combination of premises, what has been in the past, what the trade relatively to other trades will bear, and especially local conditions.

In the great city of New York, the port of entry for all the immense immigration, better wages are habitually paid than even in the adjoining cities of Brooklyn and Jersey City. In fact New York leads the market.

There is less continuous work in country towns, so that in some instances wages ought to be higher, but such is never the case.

Again, callings that require special training and skill, ought to be better paid than those with lower qualifications, yet such is not a regular practice.

In brief, there is no fixed rate of wages except that which is arbitrarily made by the workers in council, predicated on what the trade will bear.

There is certainly a broad line of demarkation between educated experts and plain laborers; but between proficientes the lines of wage-worth are arbitrary.

That the work of the worker is not always a material element in estimating the wage-rate, is shown in the difference of amount between woman's and man's wages, even where equal excellence is presumable; male and female dressmakers, for instance. It is, I believe, a fact that a man-costumer will get much more than a woman of the same class and style. It may be said that this is from superior merit, but it is pretty certain that it is a caprice of fashion.

The sum is usually quoted to show the wage earnings; the real point is, however, the purchasing power of the wages. Bread, meat, clothes, lodgings, all differ with localities.

Another most important question is, how many persons are unemployed at any given time, and what influence that class, or part of a class, has on the general or local wage-rate?

We know that unions tend to fix wages; do we know what effect unions have on employment?

One question that should be, but rarely is, taken into account in the wage estimate, is the liability of the worker to accidents, or loss of health. Almost all accidents are at the worker's own risk, even when caused by default of other workmen, who in such case may be looked upon as the employer's agent. Miners in coal-pits suffer by fall of soil, bad shoring, breaking of elevator rope, etc. These are regarded as incidents of the calling, and so

they are; but what if caused by the neglect of proper and reasonable care? The accidents to laborers in railroad stations, while coupling, are a large addition to the death-roll, but this is surely not the fault of the poor man who is crushed.

Again, risky or offensive callings are, by a perversion of social equity, poorly paid; as if performed by the Pariahs of society. In railroad accidents the passenger is indemnified, but the employé is put in the position of a joint contractor, and so gets no relief for hurt or damage.

In factories and other labor aggregations the theoretic wage idea seems to be "how little will keep the working animal in working condition."

High prices don't imply correlatively high wages. High prices may be caused by short supply, or special conditions, as at gold mines, etc.

There are cases in which employers are willing to pay extra wages for extra efficiency, at least it is so stated sometimes. But the willingness to pay higher wages than the scale, for special cause is as has already been said, not a popular idea.

STRIKES.

The number of strikes for 1887-88 is 1,021, showing a gradual decrease from the totals of the preceding years, which, in 1886, was 2,061, and in 1887 was 1,604, indicating a more stable condition of the relations between employers and employées. The successful strikes were 489, unsuccessful 408, compromised 93. The number engaged in strikes was 24,054, against 51,731 in 1887, and 127,392 in 1886, a disproportion that would indicate the increasing solidarity of the workman's position and the disposition to conciliate shown by employers. While in the numbers of workmen "refused work" after strike, 2,270 in 1888 against 8,176, in 1887, we find proof of increased liberalism on the part of employers toward those who had stood out for their supposed rights. The proportional amount of wages sacrificed in self assertion is greatly in excess of preceding years, standing, as it does, at one million in 1886 (fractional figures omitted). The implication would be that a higher paid class of men were engaged in the troubles of 1888, or possibly the returns and estimates may be more exact.

Gain in wages by strikes for 1888 is estimated at \$359,551, against \$944,682 in 1887, a proportional decrease from the figures of the preceding year. The loss to employers is figured at \$464,230, as against \$1,102,576 in 1887 and \$1,644,812 in 1886.

The number of strikes for the years 1885, 1886, 1887 and 1888 were 4,908; of which 2,031 were successful, 741 partly successful or compromised, 213 doubtful, 1,662 unsuccessful, and 261 were pending at the close of the investigation. The number engaged in these strikes was 230,043 persons, of whom 16,837 were refused work after the strikes. There were expended by the labor organizations as relief and for the conduct of strikes \$887,666.46. The loss in wages amounted to \$5,649,437.44, and the estimated gain in wages for one year is placed at \$2,725,069.23. In many cases the gain should be estimated from the time of the settlement of the strike to the present; this would greatly increase the amount. The loss to employers from all causes reaches the sum of \$3,211,618.70. The bureau's investigations of 1885 did not include "amount of wages lost," "estimated yearly gain," nor "loss to employer from all causes."

NUMBER OF ESTABLISHMENTS ON STRIKE.

1886.	1887.	1888.	Total.
2,061	1,604	997	4,662

NUMBER OF PERSONS ENGAGED IN STRIKES.

1886.	1887.	1888.	Total.
127,392	51,731	23,879	203,002

NUMBER OF PERSONS REFUSED WORK AFTER STRIKE.

1886.	1887.	1888.	Total.
6,891	3,176	2,270	6,837

LOSS OF WAGES TO EMPLOYÉES.

1886.	1887.	1888.	Total.
\$2,552,554 00	\$2,013,229 45	\$1,068,668 99	\$5,649,437 44

COST OF STRIKES TO LABOR ORGANIZATIONS.

1886.	1887.	1888.	Total.
\$329,080 00	\$217,069 78	\$135,357 05	\$681,506 83

ESTIMATED GAIN IN WAGES FOR ONE YEAR AS RESULT OF STRIKES.

1886—Number engaged.....	34,832	Amount gained.....	\$1,420,885 00
1887—Number engaged.....	11,472	Amount gained.....	944,632 55
1888—Number engaged.....	8,489	Amount gained.....	850,609 08
Total.....	49,793	Total.....	\$2,716,126 63

LOSS TO EMPLOYERS AS RESULT OF STRIKES.

1886.	1887.	1888.	Total.
\$1,644,812 00	\$1,102,576 70	\$464,230 00	\$2,211,618 70

MICHIGAN—MR. A. H. HEATH.

The Michigan Bureau is engaged at present upon an investigation into the economic and social conditions surrounding the employes in the furniture manufacturing industry in the State. It is our aim to make a thorough investigation by industries, believing that better results can be obtained than by attempting to investigate a large number of industries at the same time.

We employ special canvassers to visit each individual operative in the factories and obtain replies to questions upon the blanks furnished each canvasser for this work.

These questions relate to occupation, age, nationality, marital relations, number of children in families, number of children attending school, number of persons dependent for support upon each wage earner, number of years at present occupation, number of months employed during the year, annual earnings, amount of lost time, cause for lost time, annual family expenses, savings, number owning homes, value of homes, number renting, monthly rental, number owning musical instruments, amount of life insurance, and other questions.

We have, at the present time, over five thousand reports secured by our canvassers, and shall complete this industry; and if we have time, shall extend the investigation to some other industry.

In most instances our canvassers have been cordially received by the manufacturers, who have extended to them such privileges as were necessary to enable them to secure the desired information.

The progress of the bureau has been quite satisfactory thus far this year.

WISCONSIN—H. M. STARK.

The scope of work and the duties of the Wisconsin bureau are constantly broadening and increasing. The last legislature passed three new laws affecting the executive and statistical labors. The first, limiting the age at which children are allowed to work at thirteen, instead of twelve years of age. The new law includes commercial establishments, as well as factories and workshops. The second gives our inspectors authority over office buildings, tenement houses, assembly halls and theaters, to enforce means of escape in case of fire, and limiting the hotels exempt from these provisions to those which are designed for occupancy by twenty-five or more, instead of fifty persons. The third establishes the weekly payment of wages, with the natural exceptions.

The legislature, however, did not provide for the much needed increase of clerical force.

Statistics.—The bureau is at present engaged in gathering data for its fourth biennial report, which, statistically, will be almost entirely devoted to the annual earnings, average daily wages, lost time, etc., of artisans in the building trades.

The statistics of factory labor and commercial occupations will be merely incidental, and so sifted and digested as to test the leading contents of the third report.

The body of the fourth report will necessarily be made up of a synopsis of the reports of inspection. That chapter, however, will not be devoid of

statistical interest, inasmuch as it will contain a minute description of every manufacturing plant in the State, with the number of male and female employés, distinguishing adults and children of both sexes. It will give accurately the total steam horse-power and water horse-power; the number of stationary engines and boilers; the kind of elevators in use. The general remarks will be a record of all accidents which have occurred, the amounts spent by the manufacturers for building improvements, and the cost of new machinery added to the plants since the former inspection.

The work of our Inspectors.—The total number of factories visited by our inspectors since March 4, 1889, is 716; the number of hotels, 183; and the number of all other institutions coming within the scope of the Wisconsin personal safety laws, 188. The reports of the inspectors are sent in daily, and immediately recorded. No less than 610 orders of all kinds, conducive to the health and safety of factory operatives, and the traveling public, have thus far been issued, ninety per cent of which are complied with, without any further correspondence on the part of the main office. In La Crosse, a city of less than 30,000 inhabitants, a total of ninety-three orders of all kinds were issued, and that, too, after all orders given at a former inspection, two years ago, had been faithfully complied with. In this way we hope to reduce the number of accidents in Wisconsin factories to an absolute minimum.

The expenses to the State for every day of actual travel by the inspectors, is only \$2.87, exclusive of salaries. The law does not allow traveling expenses to the chief inspector while working in the city of Milwaukee, which occupies three-fourths of his time.

Growth of the Bureau.—We are happy to state that the work of the bureau is being better appreciated from year to year. No longer have we reason to complain of reluctance on the part of employers to furnish required information; on the contrary, ready, explicit, and even cheerful compliance is shown in letters and actions all over the State.

The relations between the bureau and the artisan classes have, through constant correspondence and contact, grown into an almost personal character. Ninety-five per cent of the answers received to our blanks are full, reliable and explanatory. This confidence was gained, first, by prompt and courteous correspondence, and secondly, by a systematic and judicious distribution of the reports of the bureau.

The third report represented a factory population of 68,000 persons, about three-fourths of the actual number. One copy of the report was sent to every ten employés, requiring 6,800 copies; also, one copy to each of the 1,221 factories reported, a copy direct to every newspaper published in Wisconsin, and one to each individual workman who had filled out the blanks sent out by the bureau. In this way the bureau, which, in 1883, was created upon a stepfatherly plan, and looked upon as a sinecure, has developed into a branch of State government which today receives a good deal of favorable attention.

In this connection, we should state that Governor Hoard, of Wisconsin, is intensely interested in the work. At the same time we are sorry to state that a general sense of economy led the last legislature to diminish the editions of *all* public documents, and by this action the distribution of the next report is curtailed to one copy to every twenty employés. It is false economy which will cut down the only medium by which the most numerous class of citizens and taxpayers can speak for themselves.

The Press.—The press of Wisconsin is in full sympathy with the work of the bureau, gained chiefly by furnishing and preparing statistical and industrial items of local interest. The mass of information of this character, coming to our hands from day to day, but either too bulky to preserve for the formal report, and yet very interesting if used immediately, is very great, and much appreciated by editors and publishers.

The personnel of the bureau consists of a commissioner, a deputy commissioner, two factory inspectors, a chief clerk, and a messenger.

Hon. Frank A. Flower, after six years' service, retired at the expiration of his term, in February last.

Upon invitation, Mr. Matt. J. Simpelaar, deputy commissioner of the Wisconsin Bureau, furnished some additional statistical information. Among other things, he stated as a positive fact that female factory labor in Wisconsin is only ten and one half per cent of the whole. Also, that the factory population of Wisconsin cities, outside of Milwaukee, is a little over twelve per cent.

Mr. Simpelaar, on behalf of the bureau, also presented the following table, expressly prepared for this convention:

Table showing the comparative purchasing power (in quantities of wheaten bread, beef, mutton, pork or butter) of the wages received for ten hours of labor in some European countries and in the State of Wisconsin, United States of America. The wages given are for skilled blacksmiths. All weights are reduced to the English-American standard—one pound—16 ounces Avoirdupois. Compiled from direct correspondence to the Bureau of Labor and Industrial Statistics of Wisconsin.

Countries.	Earnings per Hour.	Hours of Labor per Day.	Earnings for every Ten Hours.	Purchasing Power.			
				Wheaten Bread.	Meat.	Pork.	Butter.
WISCONSIN (United States)— Milwaukee.....	20 cents.	10	2 dollars.	40 lbs.	14 lbs.	18 lbs.	10 lbs.
GREAT BRITAIN— London and Glasgow.....	6.35 pence.	9	5 shillings 3½ pence.	48 lbs.	9 lbs.	11 lbs.	5½ lbs.
GERMANY (Rhine Province)— Coblenz.....	27½ Pfennige.	11	2 Mark 75 Pfennige.	30 lbs.	5½ lbs.	5 lbs.	3½ lbs.
FRANCE— Montpeller.....	50 centimes.	10	5 francs.	31¼ lbs.	4 lbs. 10 oz.	5½ lbs.	4 lbs.
Nîmes.....	50 centimes.	10	5 francs.	31¼ lbs.	6 lbs. 2 oz.	6 lbs. 2 oz.	4 lbs. 10 oz.
Lille.....	50 centimes.	10	5 francs.	33¼ lbs.	8½ lbs.	5½ lbs.	3 lbs. 5 oz.
BELGIUM— Ghent.....	48 centimes.	10	4 francs 80 centimes.	24¼ lbs.	7½ lbs.	8¼ lbs.	2 lbs. 1½ oz.
DENMARK— Copenhagen.....	30 Öre.	10	3 Kroner.	40 lbs.	8½ lbs.	8½ lbs.	3 lbs. 8 oz.
SWEDEN— Stockholm.....	31 centimes, or 23 Öre.	11½	3 francs 10 centimes, or 2 Kroner 20 Öre.	18¼ lbs.	7¼ lbs.	5½ lbs.	2½ lbs.
ITALY— Reggio (Prov. Emilia).....	25 centesimi.	11	2 lire 50 centesimi.	17 lbs. 13 oz.	4¼ lbs.	3¼ lbs.	2¼ lbs.
HOLLAND— 's Gravenhage (The Hague).....	20 centen.	10	2 guilder.	27¼ lbs.	7¼ lbs.	6 lbs. 5 oz.	2¼ lbs.

	Bread.	Meat.	Pork.	Butter.
Wisconsin, United States of America, per cent.....	100	100	100	100
London, England.....	120	64½	68½	55
Coblenz, Germany.....	75	89½	81½	35
Montpellier, France.....	78½	33½	34½	89½
Nimes, France.....	77½	48½	38½	46½
Lille, France.....	88½	59½	34½	32½
Ghent, Belgium.....	60½	53½	51½	21½
Copenhagen, Denmark.....	100	58	50½	81½
Stockholm, Sweden.....	38½	55½	84½	25
Reggio, Italy.....	44½	32½	21½	22½
The Hague, Holland.....	68½	52½	39½	28½
Total.....	748½	491½	405½	332½

IOWA—MR. E. R. HUTCHINS.

I find my State next on the list. I may say that the bureau in Iowa is much in the same position as those in most of the Western States. We have very little money to use, and we have to use what we have very carefully. I realize very forcibly, as I listen to the remarks of those in charge of bureaus in the older States, the value of the special agent in the field. The appropriation for the Iowa bureau will not permit this. We must depend almost entirely upon returns made through the mails. Still, we have been quite successful. Each year adds to the number of those who send in returns. This is at least encouraging. I cannot quite agree with Prof. Bolles regarding the miner's pay. It may be, and I doubt not is, as he states, in Pennsylvania; but in Iowa two very serious drawbacks to the miner's financial success present themselves. These are the screens and the company stores. By direction of the legislature we shall make a general inquiry as to child labor, and find out so far as possible, to what extent it prevails. We shall also continue the investigation of women wage-earners, a subject of very much interest, and, I think, perhaps somewhat overlooked. In this line of work I have been greatly encouraged by the co-operation of Dr. Jennie McCowen, of Davenport, Iowa, through whose exertions a working-women's club has been formed in that city, with a large membership and a lively interest.

Another feature of the forthcoming report will be the reports of the savings banks, relating especially to the amount of deposits made during the past two years by wage-earners. The returns thus far received indicate a decided gain in this regard. The subject of assessments and taxation will form another part of the report. This will apply to cities and counties, and I think will afford valuable data. The general condition of wage-workers, their wages, cost of living, etc., will form a chapter in the report.

I wish very much that the bureaus could select at least one topic upon which we could all unite for investigation. I feel sure that the reports would be valuable and interesting, and bring the people into a warmer

sympathy and a more kindly co-operation in our work. I know its obstacles, yet I believe some topic could be selected upon which we could unite.

At this point a recess was taken, and the members of the convention were individually introduced to the governor of the State, Hon. Morgan J. Buckley. After a pleasant half hour the convention adjourned until the following morning.

MORNING SESSION.

The reports of States were continued.

KANSAS—FRANK H. BETTON.

I understand it to be the desire of the convention to become familiar with the facts suggested by my friends, Mr. Hotchkiss, of Connecticut, and Mr. Jenkins, of Nebraska. When our Kansas bureau was first established it was regarded to a great extent as a concession to the labor agitation then prevailing, and the appropriations were limited. The members of the legislature, as a rule, did not know anything about the practical workings of a Bureau of Labor and Industrial Statistics, and it was an untried experiment. I succeeded in getting a slightly increased appropriation this year for our bureau, and was given additional help.

As to the practice of sending out blanks to working-men, it is in a large majority of instances, in my State, just so much money thrown away for stamps. I now make personal examinations and investigations, visiting monthly three of the largest cities of the State, and gathering a total of some one hundred and fifty reports from five or six selected trades, taking different trades each year. This year I am working the extra man given me in the city of Topeka. I am this year taking as a special subject for investigation the condition of the women workers of the State. There are quite a number of them, a good many being employed in factories.

We have eight hundred and forty papers and weekly periodicals published in Kansas, and I have prepared a blank this year, asking for information regarding this industry. These blanks call for the number of hands employed, the amount of wages paid, etc.

There is one other subject for statistical investigation that is this year commanding my attention, and that is the meat question. It would take me about fifteen or twenty minutes to submit the paper that I have prepared, if the commissioners desire to hear it, but at the same time I do not want to impose on your good nature.

A desire being expressed to hear the paper, Mr. Betton read as follows:

Probably many, if not all, of the members of this convention are familiar with the fact that during the sessions of the legislatures of their respective States—some of which have only recently ceased from their labors—the question of a “beef combine,” or dressed beef monopoly, was exhaustively discussed. It was charged in the senate of my own State, and, if I mistake not, in the legislatures of several of the States, that a combination existed

among the large packers of Chicago, Illinois, and Kansas City, Missouri, to keep down the price paid for live animals at the stock-yards of those cities, with the result, that prices had fallen so low that the the farmer and cattle-raiser not only realized no profits from his business, but that he was producing at an actual loss. While on the other hand it was claimed that the consumer was paying as much or more for his meat as he had formerly done under the old system of local slaughtering.

As a result of these charges, bills were introduced providing for a system of local inspection, requiring cattle designed for food to be inspected by a duly authorized officer, just previous to their slaughter, at the place where the meat was to be offered for sale. In other words, it was proposed to return to the old system of local slaughtering-houses, and to prohibit, under penalty, the sale of the meat killed at our great packing-houses, which has been distributed over the country by means of the perfected system of refrigerator cars, and which has displaced the old system of local butchering in almost every community of any importance throughout the country. In New Mexico, and in Minnesota, I believe, laws of this character were enacted, and strenuous efforts were made in the legislatures of several other States, which in most instances came nearly proving successful. Through legislative action, a convention, consisting of committees of the legislatures of many of the Western States, met in the city of St. Louis, and after a thorough discussion of the situation, recommended that action be taken by the States represented in conference looking to the formulation of a local inspection law. It may be that the charges made against the packing-houses are true so far as they affect the cattle-raiser. That side of the question will be presented in connection with this paper, if the convention should kindly grant me time and space for its proper submission.

But it seems to me that as labor commissioners, especially charged, as most of us are, with the investigation of all subjects affecting the interests and the welfare of our vast army of wage-earners, what we should seek to learn is, whether the developments of the dressed meat industry has cheapened the cost of meat to the great mass of the consumers, and to this branch of the subject I think we should confine our investigations. Next to the "staff of life," meat is the most important item in the budget of the average working-man, and represents the largest sum in his food outlay. In fact, the cost of "bread and butter" are overshadowing factors in the family expense book, and any system designated to cheapen prices to the laborer, and cause the steak and the roast to become a familiar visitor to his table, it seems to me, is worthy of full investigation by this convention of labor commissioners. Viewing the subject in this light, I addressed letters to the commissioners of the States where this agitation for local inspection was most prominent, suggesting that information be sought as to what effect the introduction of meat killed at the large packing-houses of Chicago and Kansas City had had in the cheapening of the product to the great mass of consumers, and that the result be reported to this convention, to the end that further concerted action might be taken by this body, if deemed expedient.

Individually I have interviewed a number of the longest established butchers, located in two or three of the principal cities of my own State. The answers to my questions were substantially alike in all cases; and the following obtained from a butcher in Kansas City, Mo., who has been engaged in the business in that city continuously for the last twenty-five

years, and whom I have personally known for even a longer period, will serve practically to illustrate the results obtained from the half a dozen or more individuals interviewed. This gentleman furnished me with the following statement:

"In 1879 I paid 3 cents per pound on foot for my cattle, sold sirloin steak at 12½ cents per pound, sirloin roast 12½ cents, rib roast 10 cents, and corned beef at from 6 to 8 cents; I got 7½ cents per pound for my green hides, and 8 cents per pound by the barrel for my rendered tallow. When I quit butchering my own beef, in the spring of 1881, I was paying 6 cents on foot for cattle, and sold sirloin steak at 15 cents per pound, round steak at 12½ cents, rib roast at 10 cents, boiling pieces at 8 cents, and corned beef at 6 cents; I got 7 cents for green hides, and 8 cents for rendered tallow. I now sell packing house beef as follows: sirloin steak at 12½ cents, round steak 8½ cents (three pounds for 25 cents), rib roast 8 cents, boiling pieces 5 to 6 cents, and corned beef at 5 cents; but I only get 2½ cents per pound for my green hides, and from 2½ to 3 cents for cow, and 4 to 4½ cents for steer tallow. It will be observed that there has been a decline of about sixty-four per cent in the price of hides, and fifty per cent in the price of tallow, during the past eight years. I buy one or two beeves at a time from Armour's packing-house, but I find it much more difficult to dispose of the poorer parts than formerly. All classes of people seem to want the best cuts. The neck and soup-bones are very hard to get rid of, and in the summer I frequently have to throw them away. I sell a whole shank for ten or fifteen cents. The cheap boarding house keepers, and many others, go to the packing-houses, where they can buy the cheap parts of a beef at very low rates. I think that people who live within reach of the packing-houses can buy the ordinary parts of a beef now much cheaper than they could under the old system; how it may be in distant cities, I cannot say. I could sell meat cheaper if I could realize anything near what I used to for hides, tallow and the poorer parts of the carcass."

In order to learn how cheap meat was sold at the packing-houses, I visited the retail department at Armour's, and was furnished with the following figures:

Porterhouse steak.....	12½ to 16 cents per pound.
Sirloin steak.....	12½ to 15 cents per pound.
Round steak.....	8 cents per pound.
Flank steak.....	8 cents per pound.
Rump steak.....	7 cents per pound.
Chuck steak.....	6 cents per pound.
Porterhouse roast.....	15 cents per pound.
Extra rib roast.....	14 cents per pound.
Rib roast.....	10 to 12½ cents per pound.
Chuck roast.....	6 to 8 cents per pound.
Rump roast.....	6 cents per pound.
Boiling pieces.....	3 to 5 cents per pound.
Corned beef.....	4 to 6 cents per pound.
Hearts.....	10 cents each.
Liver.....	15 cents each.

I have the full list here, as furnished me by the obliging superintendent, but I have quoted enough to present a fair comparison with the figures given by the local butcher, before quoted. From the information gained I have prepared the following table, which, though far from complete, may serve to form a basis for comparison:

Local Butcher, Price Per Pound.				Packing-house, Price Per Pound.
	1879.	1881.	1889.	1889.
Sirloin steak.....	12½ cents.	15 cents.	12½ cents.	12½ cents to 15 cents.
Round steak.....		12½ "	8½ "	8 cents.
Rump steak.....				7 "
Chuck steak.....				6 "
Sirloin roast.....	12½ cents.			
Rib roast.....	10 "	10 cents.	8 cents.	10 to 12 cents.
Chuck roast.....				6 to 8 "
Rump roast.....				6 "
Boiling pieces.....		8 cents.	5 to 6 cts.	8 to 5 "
Corned beef.....	6 to 8 cts.	6 "	5 cents.	4 to 6 "

By referring to the packing-house price list, it will be seen that the different kinds of steaks and roasts are given very much more in detail than they are by the local butchers, grading higher as well as lower. This may be accounted for by the fact that those packing-houses have very large retail departments, and do a greater business than the ordinary retail meat dealer. They keep on sale in large quantities the choice parts of the carcass, for first class hotels, etc., for which the smaller dealers have slight demand; while on the other hand they have opportunities to dispose of the coarser and less desirable parts at lower prices than the butcher has occasion to quote. The local butcher says that in 1879 he paid three cents per pound, live weight, for his cattle, while in 1881 he paid six cents, or just double; still his prices for meat show very little change. In 1889 he sells his sirloin steak for two and one-half cents per pound less than in 1881, when he did his own butchering, his round steak for about one-third less per pound, his rib roast for twenty per cent less, his boiling pieces at from twenty-five to thirty-seven and one-half per cent less, and his corned beef at about sixteen per cent less; while the packing-house prices on the cheaper grades of meat show a still greater reduction. These figures show that the cost of beef, especially for the less choice parts of a carcass, are lower than they were in 1879 or in 1881, at least in the vicinity of our Kansas packing-houses. This tendency of the packing-houses to a closer classification of the different parts of an animal, results in raising the price of the more desirable portions, with a corresponding cheapening of the coarser, but just as nutritious, pieces. A close examination of the retail packing-house price list will justify this statement. It may not be generally known that in Europe this custom does not prevail; meat is meat, and one part of a carcass sells for about the same price per pound as does another, possibly.

A comparison with the figures obtained by some of my brother commissioners will enable us to determine whether the introduction of refrigerator cars, and the transportation of dressed beef, has been a factor in effecting the reduction.

In view of the legislative action providing for the St. Louis convention, Hon. H. B. Kelley, of McPherson, a prominent member of the Kansas State Senate, and chairman of the committee appointed by the Governor to attend that meeting, prepared the following very able paper, which gives a broad and comprehensive *resume* of the entire question:

"For the first time in the history of our government under the constitution, a convention has been called by the legislatures of several of our States

for the purpose of deliberating upon a great question affecting common interests, which seems not to be within the unquestioned delegated power of the general government. Any matter touching the food supply of our people is worthy of the profoundest legislative consideration, and should receive it.

“‘Products and prices’ are the great economic questions of civilization, and the proposition that supply and demand regulate prices needs no argument, where products flow unrestrained through the channels of commerce between producer and consumer; but check this natural flow, hoard the staples, store the bread and meat supply in granaries and warehouses, erect barriers, this side of which there is a glut and beyond which there is dearth; lay heavy tribute on the passage of these staples, and the natural channels become disturbed; an abnormal, and hence an unhealthy, condition follows, in which, while the producer receives the minimum, the consumer pays the maximum price for that he consumes.

“Forty years ago the population of the world existed in isolated neighborhoods, a part of which might suffer famine while others reveled in overabundance. This is now changed, the multitude of neighborhoods having been consolidated into one vast civilization that reaches around the globe. Steam and electricity have obliterated time and space, and brought the remote regions of the earth into quick and easy communication with the great centers of civilization. The frontier has disappeared from the maps, while the term ‘backwoods’ has been dropped from our vocabulary. Every continent and island is supplied with means of transportation for its surplus products to the places where markets await them.

“No country has at this time a monopoly of the food supply of the world, nor are prices longer regulated by local supply and demand; hence, in an investigation of the causes that determine the prices of the staple food supplies, we must measure the world’s products with the demand in the world’s market. Prior to 1880 the United States was the great meat shop for western Europe; but the inventive genius that discovered the process of shipping perishable products over long distances in refrigerator cars and ships, brought a world of fresh meats from South America, Australia and New Zealand, placing them in sharp competition with American meats in the markets of Europe. The invention of the refrigerator brought to Europe an almost inexhaustible supply of the cheapest fresh meat that ever found its way to that continent. This meat supply was unknown in the markets of Europe prior to 1880, the year in which the first experimental shipments were made from the Argentine Republic, Australia and New Zealand. In 1881 Australia shipped to London 110,000 weight of *fresh meat*; while in 1886 shipments reached the enormous quantity of about 30,000,000 weight. In 1880 the Argentine Republic exported to England but \$50,000 worth of fresh meat, while in 1886 that country sent \$1,800,000 worth to the same market; and that Republic is now paying an annual bounty of \$500,000 per year upon the exportation of fresh meats. During the first quarter of 1888 the shipments of mutton to London, from Australia, New Zealand and the Argentine Republic, reached 250,000 carcasses. Canada, too, of late years, has become a strong competitor with American meats in the markets of Europe. Prior to 1872, the Dominion shipped no cattle to England; the trade, commencing in that year, reached about 8,000 head in 1878, while in 1887 it had reached 63,000 head of cattle and 68,000 head of sheep. Nor does Canada stop with

shipping to Great Britain; but her shipments of cattle to this country reached, in 1887, about 46,000 head, and 363,000 head of sheep. Thus our neighbor on the north, during the past ten years, has not only been dividing English the market with us, but she is also sending large quantities of meat into this country to compete with American meats.

"Some idea may be had of the almost inexhaustible meat supply of the Argentine Confederation, when it is remembered that with a population of less than five millions of people, there were about eighteen millions head of cattle and one hundred and forty millions of sheep in that country in 1880; while in the United States we had but thirty-three millions head of cattle and forty millions head of sheep the same year. Since 1880 the increase in the number of cattle has been proportionately greater in the United States than has been the increase in population; the ratio of cattle to population in 1880 being about six animals to nine of population, while in 1888 it was about seven animals to nine of population. In Kansas the increase has been much more rapid, as in 1878 we had about five cattle to seven of population, and in 1888, sixteen of cattle to fifteen of population. Notwithstanding low prices, corn-fed cattle are higher now than they were ten years ago, while during last November such cattle brought better prices than at any previous time during the last ten years. The increasing supply of grass beef from South America, however, keeps the grass-beef of this country down; while the corn-fed meat of the United States, practically without competition in the world's market, reaches good prices as frequently as it falls below them, notwithstanding Great Britain is receiving an annually increasing meat supply from Canada, South America and Australia. The Canadian meat supply has grown from almost nothing to its present immense proportions during the last ten years. South America, Australia and New Zealand, commencing in 1880, with Canada commencing in 1878, now supply Great Britain with perhaps half of all her fresh meats. These countries, strong competitors in the English market with the grass-beef and mutton of the United States, were unknown in European markets ten years ago.

"The growth of the meat product in the United States of late years may be seen from the following:

LIVE STOCK STATISTICS OF THE UNITED STATES.

1870.		1880.	
Sheep.....	40,858,000	Sheep.....	40,765,000
Swine.....	28,781,000	Swine.....	34,034,080
Cattle.....	26,868,000	Cattle.....	33,268,000

1888—Cattle, 49,000,000; swine, 44,000,000; sheep, 43,000,000.

In the cattle States, and especially in the grass States, we find the following increase or decrease since 1880:

KANSAS.

1880.		1888.	
Sheep.....	746,448	Sheep.....	408,744
Swine.....	1,787,889	Swine.....	1,433,245
Cattle.....	1,451,067	Cattle.....	1,619,849

DAKOTA.

1880.		1888.	
Sheep.....	30,244	Sheep.....	216,019
Swine.....	63,394	Swine.....	533,970
Cattle.....	140,815	Cattle.....	767,809

IOWA.

1880.		1887.	
Sheep.....	455,359	Sheep.....	429,488
Swine.....	6,084,316	Swine.....	4,461,087
Cattle.....	2,612,036	Cattle.....	2,116,417

TEXAS.

1880.		1887.	
Sheep.....	2,411,638	Sheep.....	4,275,394
Swine.....	1,960,371	Swine.....	940,929
Cattle.....	4,084,606	Cattle.....	7,081,976

INDIANA.

1880.		1887.	
Sheep.....	1,100,511	Sheep.....	1,394,045
Swine.....	3,186,413	Swine.....	3,801,248
Cattle.....	1,363,780	Cattle.....	1,779,351

NEBRASKA.

1880.		1887.	
Sheep.....	199,453	Sheep.....	402,744
Swine.....	1,241,724	Swine.....	1,433,245
Cattle.....	758,550	Cattle.....	1,619,849

ILLINOIS.

1880.		1884.	
Sheep.....	1,087,073	Sheep.....	933,380
Swine.....	5,173,266	Swine.....	2,808,898
Cattle.....	2,384,322	Cattle.....	1,990,927

LABOR AND INDUSTRIAL STATISTICS.

COLORADO.

1880.		1886.	
Sheep.....	746,443		
Swine.....	7,556		
Cattle.....	846,839	Cattle.....	885,038

MONTANA.

1880.		1887.	
Sheep.....	184,277	Sheep.....	200,000
Swine.....	10,278	Cattle.....	1,400,000
Cattle.....	172,387		

WYOMING.

1880.		1887.	
Sheep.....	140,225		
Swine.....	567		
Cattle.....	278,073	Cattle.....	753,008

"The number of meat animals, aside from milch cows, in the United States in 1878 was 88,000,000; population, 48,000,000; an average of about $1\frac{1}{2}$ animals to each inhabitant. The number, aside from milch cows, in 1888, was 122,000,000; population, 60,000,000; making an average of about $2\frac{1}{30}$ animals to the inhabitant, or an increase of nearly one-sixth of an animal *per capita* to the entire population. Confined to cattle alone (excluding milch cows), we had in the United States, in 1880, 21,231,000 head or forty-two *meat* cattle to each one hundred population, while in 1888 we had 34,378,000 head of meat cattle, or fifty-five meat cattle to each one hundred of population, a gain of about $23\frac{1}{2}$ per cent in eight years.

"Since 1880 the increase has been remarkable in the States and Territories of Kansas, Dakota, Texas, Indiana, Nebraska, Colorado, Montana and Wyoming. The aggregate increase in these States and Territories since 1880 has been 7,312,000 head of cattle, while in the same States the number of swine has fallen off from 19,000,000 in 1880 to 15,000,000 in 1887.

"The great increase in cattle in the United States since 1880 has been in the range districts, while in the States of Iowa and Illinois there has been a decrease to the extent of about 875,000. Just as the ranchman with his range meat, from the western States and Territories, has driven the American farmer out of the grass meat market, so the cheaper and more abundant grass meats of South America and Australia are now crowding American range meats out of the European markets, the conditions confronting American beef being a market annually becoming more circumscribed, with a rapidly increasing supply.

"The farmer can no longer make grass meat with profit, for the reason that he cannot compete with refrigerators, rapid transportation and the

cheap pasturage of remote and favored latitudes, but when he converts his corn into pork and choice beef he has a product in which he holds a monopoly as against the world, as no other country produces corn-fatted meats in any considerable quantities. Good prices are usually obtained for this class of meats in spite of combines and pools.

"During twelve years, from 1878 to 1889, inclusive, choice corn-fed good shipping steers have been higher six years during the month of November than at present, namely: 1882, 1883, 1884, 1886, 1887 and 1888, and in the same time the November price of hogs has been higher six years than at present. On the 5th inst., London quotations for beef, dead weight, was 12½ cents per pound, and the same paper quoted Kansas City prices for choice corn-fed, live weight, at \$3.80 to \$4.20 per hundred. The rapid growth of western cattle interests during the period from 1878 to 1888, inclusive, may be seen in the growth of receipts at the Kansas City stock-yards which was, in round numbers in 1878, 175,000, and in 1888, 1,056,000.

"Receipts for 1888 show an increase of 386,000 over 1887, while the receipts of hogs at the same place show a falling off of 414,000; sheep showing an increase of 141,000 for last year over 1887. We find the following October quotations given for native shipping steers for the several years, average weight 1,200 to 1,400 pounds. We give quotations for hogs for the same time:

Year.	Steers.	Hogs.
1878.....	\$3 60	\$2 15
1879.....	4 00	3 25
1880.....	4 10	4 50
1881.....	4 00	6 25
1882.....	4 85	5 60
1883.....	5 50	4 80
1884.....	5 00	4 50
1885.....	4 35	3 45
1886.....	4 65	4 00
1887.....	4 80	5 00
1888.....	4 55	5 40
1889.....	4 40	4 40

"The annual export meat supply increased during the last ten years, as follows: From Australia and New Zealand, from nothing in 1880, to 30,000,000 lbs. in 1886; from the Argentine Republic (estimated), \$3,000,000 worth for 1887, and from Canada nearly \$7,000,000 worth the same year. Since 1880 the number of meat animals in the United States has increased by about 28,000,000, or nearly 8,000,000 head of meat animals above the ratios to population that obtained in 1880. As Europe draws largely upon the recently developed regions for her bread supply, so also does she for her supply of beef and mutton. In 1887 she took but 43,000,000 pounds of our beef, while we sent her 360,000,000 pounds of our pork, making our shipments eight pounds of pork to one pound of beef. Whatever may be the

effect of combines upon prices to the producer in our investigation of the subject, we must not overlook the revolution that has been wrought by means of refrigerator shipments and cheap transportation that have since 1880 brought within reach of European consumption from Canada, Australia and South America a greater supply of fresh meats than the entire product of the United States amounts to.

"Whatever may appear to be the causes that depress the price of bread and meat to the producer, investigation must keep in view the changed conditions from local markets, local supply and demand, to general markets, and the world's supply and demand; the change from restricted to unlimited and vastly increased production, improved transportation which has brought the remotest regions of the earth within quick and easy reach of the great centers of population, the successful inventions for handling and shipping to market products that a few years ago perished where raised; the refrigerator shipments of fresh meat, which has since 1880 opened new fields of supplies from which the product is much less expensive, and the quantity for export far greater than that from this country. If we do this, we may find a combine more potent in determining prices to the producer than the combine of which we complain. It is alleged that the effect of 'the combine,' however, tends to crowding out local butchers, hence destroying local markets for that class of stock not suitable for shipment to be found in limited numbers among farmers, causing the consumption in our towns and villages of beef grown in distant fields, while the farmer who has a cow he would sell to the local dealer is deprived of a market, as the local dealer himself has become a buyer of dressed meat from the large packing-houses. Upon the other hand, the price paid by the consumer seems out of proportion with the price paid by the producer; the gap between production and consumption being doubtless too great. Is this chargeable to the large or to the small dealer? The abundance of production should bring with it cheaper commodities to consumption, and if measures can be devised that will prevent hoarding the world's food supplies it will be in the line of a correct public policy.

"Appended is the average cost of cattle in Kansas City: For 1885, \$3.32½; for 1886, \$3.16; for 1887, \$3.14; for 1888, \$3.06.

THE RECEIPTS AND SHIPMENTS WERE AS FOLLOWS.

Year.	Receipts.	Shipped.	Sold to the Butchers and Packers of Kansas City.
1880.....	244,709	194,849	49,860
1881.....	226,863	223,718	62,145
1882.....	439,671	359,162	80,509
1883.....	460,780	387,780	73,000
1884.....	535,526	442,536	90,991
1885.....	506,627	402,431	104,196
1886.....	490,871	370,415	120,556
1887.....	669,224	483,584	185,640
1888.....	1,056,086	683,161	373,925

YEARLY RECEIPTS AND SHIPMENTS OF CATTLE AT CHICAGO.

	1885.	1886.	1887.	1888.
Receipts	1,905,518	1,964,723	2,888,085	2,610,933
Shipments.....	744,100	706,538	791,183	969,028
Leaving for packers	1,161,418	1,258,185	1,576,602	1,641,904

YEARLY RECEIPTS AND SHIPMENTS OF CATTLE AT KANSAS CITY.

	1885.	1886.	1887.	1888.
Receipts.....	506,627	490,971	669,224	1,056,086
Shipments.....	402,381	370,350	283,372	682,622
Leaving for packers	104,246	120,621	185,852	373,464

CURRENT PRICE OF BEEF CATTLE AND BEEF PRODUCTS AT KANSAS CITY.

	Week December, 1885.	Week December, 1888.
Beef hams, bbl.....	\$15 25	\$11 25
Barrels beef	7 50	5 50
Tallow, per lb.....	04½	05½
Hides.....	10½	07
Cattle, common to good.....	3 25 to 4 15	2 75 to 3 85
Butchers' steers.....	3 00 to 3 75	2 50 to 3 25

"This shows an increase in receipts of cattle, at the two principal points, Chicago and Kansas City, for the year 1888 over 1885 of 50 per cent.

"Take the selling price of beef product of 1885 and 1887 and compare with selling price of cattle same dates. Cattle were bringing more, relatively, in December, 1888, than they were in December, 1885.

"In this connection must we not recognize the great changes wrought during the last twenty-five years in our methods of commerce and manufactures. A few great railroad systems have grown out of many short, independent lines; refrigerator ships and cars transport perishable products for thousands of miles over sea and land, which before were governed by the demands of a local market. Are we not fast traveling in the line of more economic methods, which can only be attained by a systematic application of these methods, making labor more productive and reducing loss, through waste, to a minimum? Production on a large scale is crowding out production on a small scale. The flouring mill, turning out one thousand barrels per day, can work at a less cost per barrel than the one producing fifty; and the big butcher shops, killing hundreds of beefs, and utilizing every

scrap of the offal, can produce meat cheaper than can the butcher who kills only one or two. Society is rapidly realizing the fact that a newer and more efficient industrial era has begun, and legislation should be so directed as to not cripple its development, but to so guide and control it as to make it serve the best interests of all the people.

"The allegation on which the dressed beef legislation is passed, is that the combine reduced the price of live stock until the farmers were producing it at an actual loss, while the consumer was paying more than ever. The legislation provided for the inspection of all cattle killed, thus insuring a return to drovers and slaughter-houses, and preventing slaughtering at the packing factories. In many western cities such legislation has been almost successful. The price of meat has generally risen, although there were exceptions, while the price of hides and tallow had declined, the former sixty-four per cent and the latter fifty per cent. Local butchers complained that they frequently had to throw away poor pieces; everybody wanted the best cuts. The less desirable parts were often bought very cheaply at the packing-house by the consumer. In Europe one part of the carcass sells for about the same price as another. I have made a study of this whole matter, and, in my opinion, in the neighborhood of packing-houses, and every such concern, beef can be bought cheaper today than it could ten years since.

"The tendency, however, to cut the carcass into so many variously named pieces, runs up the price of certain choice cuts, while the coarser, though not less nutritious, parts are sold at a correspondingly low rate. Butchers nowadays, when purchasing a whole beef, find great trouble in disposing of the poorer pieces; and the price of the hides has materially fallen off. The tendency of these large packing-houses is to drive the local butchers out of the market. Modern refrigerator cars and vessels make it possible to transport beef in perfect condition. On the whole, the industry is one of importance and economic value.

"I have personally interviewed many people, and have learned that the prices obtained by the butchers in 1879 were considerably above what they get now. The prices of meats have been reduced by these monopolies, because the packing-houses make a good profit on the offal, which, under the old system, was thrown away.

"Great quantities of meat are sent to Europe from the Argentine Confederation, Canada, Australia and New Zealand. Notwithstanding all this, the price of corn-fed cattle from the United States is at the highest. The farmers can no longer make grass-feed profitable, but in corn-feed he has yet a monopoly, despite the combines. The consumer pays more for his beef than he ought to, when we consider the price paid to the producer."

CONNECTICUT—MR. SAMUEL M. HOTCHKISS.

I suppose that the questions that are taking up the attention of the commissioners at this time refer more especially to the work of the bureaus during the past year, the progress of the work, etc. I have to say for our work in Connecticut, that the unusual pressure of business connected with the shaping of the bureau work for Connecticut, has occupied my attention so completely, until last Saturday afternoon, that I have not made active preparation for the report of the next year. The subject has not been neglected,

but is not sufficiently matured to make it desirable to present it here at this time.

MAINE—MR. SAMUEL W. MATTHEWS.

The Maine bureau has been in existence for two years, and as it was suggested by our president that we should mention some of the difficulties we have to contend with, I would say that our first difficulty is the lack of sufficient means to do the work which we would like to undertake.

During the last legislature, I succeeded in calling attention to the necessary expenses of the bureau, and I shall be able to employ a special agent during a portion of the year. During the past year the matters which have occupied our attention were those of child labor, the employment of children in factories, and the condition of women wage-workers of the State.

The work which we are laying out is to make an investigation into the peculiar industries of our State. Blanks have been prepared, and the special agent is engaged in investigating the granite quarries of the State, of which there are a great number, and in which there are probably at the present time some five or six thousand men engaged.

Blanks are now being prepared for quarry owners, inquiring the name of each quarry, its location, the average number of workmen employed in each department, the number of working days during the year, and the rates of wages of the different classes engaged in the business, whether these rates of wages are fixed, and, if so, how they may be altered, the gross annual product, the amount of capital invested, and many other interesting questions.

Already the Rodwell quarries' rates of wages have been mutually agreed upon, and the agent reports that, on the first of June, a uniform schedule of prices is to take effect throughout the State. As the movement will be somewhat sweeping, some uneasiness in respect to the result is felt. The existing conditions at different quarries are dissimilar. The hardness of the stone and the consequent difficulty in working it, differs greatly, and the cost of living is by no means uniform. These varying conditions will be carefully considered by the bureau and the differences noted.

The granite industry in the seaport towns is closely linked with the fisheries, to which the bureau will give some attention. The number of men and vessels employed in this industry, the condition of the fishermen, partially considered in the first report, the wages paid, and the average profits, will all be fully investigated. Particular attention will be given to the lobster business, to the welfare of which so much discussion was devoted at the last legislative session, and it is hoped that an unprejudiced account of the needs of both catchers and canners may be embodied in the next annual report.

In the work of the bureau last year, especial attention was given to the condition of working-women, and of those employed in the textile industries and the manufacture of boots and shoes. Since the annual report, in which the results of these investigations are embodied, was issued, numerous queries as to the nature of the work have been received, usually coupled with the request that the writers may be allowed to add their mite to the collection of information concerning labor.

The machine shops and foundries, and the iron business in general, will also be examined, and statistics and statements from individual employes will form parts of the report.

The blanks issued this year will contain questions concerning the cost of living, and the changes in wages made during the last year, with their causes and results.

We shall also investigate the lime, slate and ice industries, which are becoming very important in our State. Other features of our work will develop hereafter. We consider it more profitable to confine our investigations to a few industries, and obtain their statistics as thoroughly as possible rather than to *skim* over all.

[At this point President Wright read a dispatch from Mr. Robert P. Porter, superintendent of the census of the United States, and editor of the *New York Press*, to the effect that he would be detained in New York by the death of the wife of the business manager of his paper. His absence was much regretted by all present.]

MINNESOTA—MR. JOHN LAMB.

I have had two years' experience since our bureau was established, and have naturally encountered the same difficulties that other new bureaus have. In the first place, the means at my command were very meagre, and the work of getting statistics among people who had no idea of the nature and objects of a labor bureau was uncommonly hard.

I took up the subject of the condition of wage-working women, as that was the subject which could be investigated at the least expense and with the least travel, the great majority of these women being in the cities of St. Paul and Minneapolis. My deputy and myself went right into the factories and obtained our information from the employers and employés by direct inquiry. We prepared blanks having about thirty questions, and as we proceeded with the work it was discovered that some of the questions could have been omitted, as they were either superfluous or of such a nature that people declined to answer them; and others could be added with good effect. I prepared two new sets of blanks at two subsequent times, with the new questions added, so as to have the inquiry as complete and comprehensive as possible. No further points of inquiry presented themselves until the time of compilation, when one or two other questions suggested themselves. For this reason I do not think that an investigation should be closed in a single report, but continued through the succeeding report with the knowledge of the subject which was acquired during the work of the first report.

I soon discovered that there are limitations to the possibilities of statistical work, as President Wright has stated in his opening address. With the exception, however, of the two points of inquiry which occurred to me during the compilation, I secured what I believe to be a very complete and satisfactory knowledge of the subject taken up. I found a few questions on the blanks of the National Bureau which were very useful to me.

The investigations into the subject of co-operation and strikes were more historical than statistical. I set out to confine the year's work mainly to one question, and to do that thoroughly, and the result is better than anything I could have secured by trying to take up several questions with the limited means at my disposal.

The bureau has been better equipped by the last legislature, and I am now in position to take up several subjects during the next two years.

Owing to the coming movement for eight hours, popular interest will be

excited, and I will look into the subject to some extent. I intend to keep an historical and statistical record of strikes and lockouts as they occur. I also intend to collect statistics of the unemployed; statistics of manual and technical training; the relation of wages to the cost of living, and statistics of production, showing the number, location, class of industry, hands employed, product, value of plant, hours employed, taxes, insurance, etc.

NORTH CAROLINA—MR. JOHN F. CROWELL.

The bureau is in the second year of its work. It has issued its first annual report, and has the second one in preparation. Last year's report was taken up mainly with statistics of manufacturing industries and a discussion of the public road system of the State. This latter part of the report has had a very beneficial effect in awakening more intelligent interest in the rural highways, over which so large a proportion of our agricultural and forestal products are brought to market. The growth of our manufactures since the last report necessitates going over the whole field again, in order to give an adequate idea of the present state of our industries.

Though the work of the bureau for the current year is not fully decided upon, yet four main subjects of great public importance are both ripe for investigation and are likely to take all the time and means we shall be able to give them. These subjects are:

1. Statistics relating to manufactures.
2. Statistics relating to the exodus of negroes to the west and southwest.
3. Statistics relating to transportation on railroads.
4. Statistics relating to mortgages on farms.

The method of gathering statistics has hitherto been generally by voluntary answers to circulars of inquiry. Whenever special investigation by the commissioner in person has been possible, the value of the information otherwise gained has been greatly enhanced.

The employers are generally willing to furnish information for honest uses, but fight shy of giving statistics that may be sought for prejudicial purposes in the interest of any party or faction. There seems to be a feeling that the bureau was organized as some sort of an ally of the labor organizations against the employers. These prejudices, together with the limited appropriation at the disposal of the bureau, are among our chief difficulties in the way of better work.

RHODE ISLAND—MR. J. B. BOWDITCH.

The bureau of the State of Rhode Island has been in existence only two years. It was established by an act of the legislature at the request of the labor organizations; and the manufacturers were, at first, inclined to assume an attitude of antagonism. The act makes the duties of the commissioner quite general, and embraces nearly everything. He is commissioner of statistics, factory inspector, truant officer, although he has no authority except to make recommendations.

Our first schedule embraced questions that were looked upon by some manufacturers as too inquisitorial, as they referred to profit and loss. A club composed of leading manufacturers, assumed an attitude of opposition, and recommended that manufacturers should not answer certain questions,

and by that means the work of the bureau the first year was not as complete as it would otherwise have been. Last year, after conferring with some of the leading manufacturers, new schedules were issued, in which some of the most objectionable questions were omitted, and the responses have been much more general in consequence.

The topics which were taken up the first year, related mainly to the textile industries, jewelry and machinery; and we embraced the same last year, and the various trades, and nearly every branch of manufacturing, and also child labor. For the present year we have a new schedule, in regard to the condition of the working-women, their various occupations, wages, etc.

Our work the first year was done mainly by sending out blanks, and by personal solicitation. Mr. Davis and myself visited the factories and inspected them quite thoroughly; but we found that by so doing we raised considerable antagonism on the part of the manufacturers. The bureau, being a new institution, they assumed that it was going to be detrimental to their interests, and during the past year we have not visited them quite so thoroughly, but have relied more upon blanks, and where the blanks have not been returned we have collected them; but answers have been more generally received, and are more complete than in 1887.

NEBRASKA—MR. JOHN JENKINS.

Allow me to return to you and the members of the convention my thanks for the assistance received by the bureau of Nebraska during its existence, which dates back to July, 1887. The reports of the conventions held, together with the various papers emanating from these bodies, have been of incalculable benefit; and the regular yearly meetings of these conventions, where an interchange of views are made, have become a necessity to the commissioners.

Our experience in Nebraska is similar to that in other States, as regards the collecting of statistical matter, where we rely almost entirely upon a system of blanks for our information; and this experience, in a great measure, is due to a misunderstanding upon the part of the persons to whom the blanks are sent, as to the value that the information asked for would be to the public, others whose sensitiveness upon that point was not equaled by their lack of modesty in inviting us to go to a place not located upon any of our State maps, believe it to be an encroachment upon their rights; others again believe that the bureau was created for the purpose of catering to a sentiment, organized labor having made a demand of our legislature that the bureau be created.

When the blanks were prepared and sent out by mail, we never questioned but what they would be filled out and returned as requested. In this, as time proved, we were deceived, as hardly ten per cent of those sent out were returned to this office. This sad experience compelled us to devise some more sure method, as the law gives us ample power to sue the delinquent party, if they do not comply with the request of this bureau within a stated time.

The plan adopted in the issuing of blanks is as follows: We have what is called a stub-book, each stub being numbered successively, also being so arranged that dates can be affixed showing when issued, when returned, when filled, when recorded, and when the second notice is sent, that part of

the stub which is cut off from the stub-book is attached to the blank, and the date of issue plainly marked thereon; the blank bears the same number as the stub, and in addition to this, we have a list of the persons or firms to whom the blanks are sent, to which is appended the same number as appears on the stub and blank. We keep a record book upon which all blanks are recorded, and is a complete register of the industry so reporting; should a blank be returned not properly filled out, we retain the original and return a duplicate with a notice stating the omission, and requesting that the desired information be furnished within a given time. When the date given, at which the blanks should be returned has arrived, which is found out by reference to the stub-book, and the same has not been returned, the parties who are delinquent are notified of their liability to prosecution should they further delay. Very often the blanks are returned to this office without any information whatever; in such a case the number of the blank gives at once the name of the party to whom it was addressed, and we then take the precaution of addressing the postmaster, asking if such a person or firm is doing business in his town or city; when an affirmative answer is returned, we then notify the party to whom the blank was sent that he return the same, which must be properly filled out and sworn to before a notary public, and sent to this office within a given time.

The form of the stub is herewith presented:

No.	Section 8 of the Law creating a Bureau of Labor
-----	Census and Industrial Statistics reads: "The said
Issued	Commissioner shall have power to prescribe blank
-----	forms, and transmit them to employers which shall
Returned	be filled out clearly and completely, with the facts,
-----	statistics, and statements asked for, and returned
Filed	to the Commissioner within such reasonable time
-----	as he may fix."
Recorded	Please return this blank executed as above
-----	within sixty days from date.
Second Notice sent	Issued.....

Though the statistical work of this bureau is far from being as satisfactory as I would desire it, yet enough has been done to refute the position taken by the memorial addressed by the alliance to congress on the question of mortgages. This memorial was placed upon the desks of the members of our last legislature, and for a time was the cause of considerable comment. No reliable information could be had except such as came from this bureau, where it was found that only twenty-five per cent of the total number of farms were mortgaged, and that the highest rate of interest paid was ten per cent, and the lowest six per cent, and only seven per cent were renters.

The question of mortgages is an important one to the lender as well as the borrower, and an accurate statement of the indebtedness in mortgages in our State would take more time and means than are possessed by this bureau; as a line of inquiry for a true condition, we would have to separate mortgages to pay off the indebtedness incurred through the possession of the

farm from that of other causes; find out how much of the amount of loan was disbursed in improving the farm, the value of the farm prior to the loan, and the value after the improvements have been made.

Nebraska is a new State, and a great amount of land has been bought on time, and these mortgages would form a class by themselves which could not be considered in the light of an indebtedness of the character of a mortgage as usually understood. And, again, it would not do to aggregate a whole sum of mortgages extending for a series of years, unless credit was given for the time-payments as well. From reports in this office, no loan was made at a valuation of more than thirty per cent, nor has a case come to light where a foreclosure did not bring fifty per cent more than the loan. Many mortgages appearing upon record are also of a fictitious nature; persons seeking to avoid the payment of honest debts have time and again caused such instruments to be made. Other cases are in existence where persons, to secure bondsmen, give mortgages that are simply security and not indebtedness. Again, mortgages have remained on file where through neglect they have not been released, yet at the same time have been paid; and so I might go on and enumerate various causes of false impressions being made, whereby simple statements are taken as facts, which work an injury to a young and growing State, whereas, if the facts were stated, it would be of benefit.

This bureau is at present engaged in compiling statistics regarding the manufacturing interests of Nebraska, and can only deal with simple subjects based upon the means at its command, preferring what it has to do, to do well. Our appropriations have been materially reduced from what we asked, and our real necessities require; our postage is limited to \$300.00, and when that is used up we will have to stop in that direction, as the last legislature passed a resolution that no deficiency bills shall be created. The legislature at its last session ordered the bureau to take up the subject of the sugar beet culture, and investigations so far made, indicate great value to our State.

The roll of States having been completed, President Wright said that the bureaus generally were poorly equipped with men and means, and that, therefore, apparatus to save time and money in tabulations were of great importance, and he invited Mr. Herman Hollerith, of Washington, D. C., to explain his electrical tabulating machine. The apparatus of Mr. Hollerith had been set up in an adjoining room for the inspection of those present. It is to be used in New York July 1st to tabulate the mortality returns. This method consists, essentially, in first recording the date relating to each person by punching holes in sheets or strips of non-conducting material (paper), and then counting or tallying these dates either separately or in combination by means of mechanical counters operated by electro-magnets. To tabulate any of the facts recorded on the cards it is only necessary to connect the corresponding binding posts of the counters, and then pass the given cards successively through the press, when the results will be shown directly on the counters. The number of facts thus recorded at one operation is only limited by the number of counters which are used.

The invention has already been described at length in various scientific journals. It has been adopted in the office of the surgeon-general and United States army for compiling army statistics.

The convention was entertained for an hour or more with an exhibition of Mr. Hollerith's apparatus.

Mr. Chas. F. Pidgin, chief clerk of the Massachusetts Bureau of Statistics of Labor, spoke as follows concerning

STATISTICAL TABULATION BY MACHINERY.

A year ago I replied to your secretary in response to an invitation to be present at the sixth convention, that the work upon the State census of 1885 would surely be completed in 1889, and in that year I should be able to be present and address you upon a subject which has naturally become somewhat of a "hobby" with me—I mean the tabulation of statistical material by means of printed or mechanical devices.

My practical experience in statistical work dates back sixteen years—to June, 1873—for in that month and year, your honored president and myself became connected with the Massachusetts Bureau of Statistics of Labor, and our official connection continued until October, 1888. During that period we saw the growth in labor bureaus that has made these conventions possible. The Massachusetts Bureau, established in 1869, had made four reports previous to Col. Wright assuming the position of chief, but they had been principally historical and argumentative—in but a small degree statistical in their nature.

Two reports, those for 1874 and 1875, were issued, and then we found ourselves face to face with our first census. We are census veterans now, for we have aided in carrying three to successful completion. A novelty was introduced in the census of 1875—the family schedule—and although an individual schedule for each person was used in the census of 1885, yet for availability in taking off social statistics the family schedule has positive and permanent advantages. In the tabulation of the census statistics of 1875 printed devices were successfully used. There were two general forms made use of. One was called the "Self-counting tally sheet," and was made available in tabulating population and social statistics. The other was a "Valuation, quantity and number sheet," and was used for aggregating the returns for manufactures, agriculture, the fisheries and commerce.

The State of Massachusetts, in 1882, published a volume compiled from statistics supplied by the United States Census Office, and in the preparation of this work mechanical devices were used for the first time. The machines were the "Pascal counting machine" and the "Billionaire adding machine." In the census of 1885 the application of mechanical devices was made to all parts of census tabulation.

In the sixteen years since 1873 the Massachusetts Bureau has issued reports aggregating 7,570 pages, and census volumes covering 8,931 pages, a total of 16,501, or more than a thousand pages a year, on the average. How has this been done? I answer, by system, and by the introduction of labor-saving devices and machines. We print only one-tenth of what we prepare. I remember that the copy for "Wages and Prices in Massachusetts and Great Britain," in the report of 1883, was only one-seventeenth of the bulk of the prepared material.

Early in 1888 I wrote a work entitled "Practical Statistics," which I hoped might be of some service to statisticians at work. Being the first book in a new field it was necessarily quite technical in its nature. It is my intention, as soon as my official duties will permit, to prepare another work which I shall call "A Statistical Factory." My proposed plan is to carry a

suppositional investigation from inception to completion, and explain in detail every process from the construction of the schedule or blank to the presentation in print, dwelling particularly upon the tabulation, and explaining the practical application and use of all kinds of printed devices and machines in statistical tabulation.

In the book "Practical Statistics," previously referred to, the various processes in statistical work are stated to be, first, the preparation of schedules, including the writing of instructions; second, the collection of information; third, the examination of returns; fourth, tabulation; and fifth, the presentation of results in print, with proper explanations and analyses. These processes cover the entire work, from the schedule to the printed book. It is not my purpose to dwell upon the origin of statistics, its growth, the scientific achievements of its followers, or to consider in detail processes that I have just enumerated. I shall have time only to consider one branch—that of tabulation.

In statistical tabulation, the four simple mathematical, or rather arithmetical, rules cover the majority of the work to be performed. We have to tally, or count one at a time. We have to add or aggregate large numbers, and we use common division to supply us with needed percentages and averages.

The old form of tallying, or counting one at a time, was to make four perpendicular lines, crossing them diagonally with a fifth one, thus making statistical "blocks of five." Another plan was to make dots in defined squares or spaces and then count up the lines or dots.

In the "Self-counting tally sheet" the dots are printed, in various colors, to aid in preliminary classifications, and by means of the numbering at the top of the sheet, as soon as tabulation ceases the total is at once known, and can be written down in the total columns. The results attained by the use of this sheet naturally varied with the ability of the clerks, but the results were from 2,500 to 6,000 "points," or tallies in six hours' work. The machines used in tabulating the census of 1885 gave from 5,000 to 10,000 points, or tallies, per day of six hours' work. The most expert clerks have attained a speed of 1,000 points in fifteen minutes, but it would be manifestly impossible to keep up such a speed for an entire day.

The "individual schedule" used for attaining the population and social statistics in 1885, was a "punch card." That is, the information was written upon the card by the enunciators, and then the clerks, by the use of conductors' punches, transferred this information to a printed margin, punching out certain letters and figures to indicate certain facts. The advantages are the substitution of a uniform writing (punch holes) for hundreds of kinds of caligraphy, and a consequent gain in the discovery or avoidance of errors. The disadvantages are numerous.

The cards are much more expensive than paper; large rooms with shelves are needed to hold the hands; thousands of "position cards" are required to separate the divisions after each sorting; the movement of the districts to and from the clerks requires constant service and great muscular strength, owing to the weight of the cards. The cost of punching is as great as that of tabulating, and being only a preparatory process, no results which can be used are obtained. If the punch card system were applied to the United States census of 1890, 65,000,000 cards would be required, which would weigh 400 tons. To shelve these properly would require at least

thirty stock-rooms, twenty-five feet square and fifteen feet high. The services of at least 100 men would be constantly required to move the districts. An expenditure of at least \$500,000 would be necessary before a single card could be counted in a way to secure a result for printing.

There is a form of punch cards which would allow of tabulation beginning at once. If the enumerators themselves were supplied with proper instructions and punches they could punch the information upon the cards instead of writing it, but the enumerator would be worth a much higher compensation than is now paid, and no clerk could read a card unless thoroughly conversant with the various punching schemes used by the enumerator. The plan is one that may be used in the future, but we are not quite far enough advanced to attempt it at the present day.

The machine used to secure the population and social statistics results from the 1885 census returns was called the "Automatic door counting machine." It consisted of two parts, the sorter and the tabulator. The former was a box with twelve compartments. The latter also had twelve compartments. In front of each was a door, which was pulled down upon a registering machine each time a card was placed in the tabulator. One counting gave twelve results. The cards could then be placed in the sorter above, and each package again subdivided into twelve separate parts. Thus, it will be seen, it was possible to secure one hundred and forty-four points without removing the cards from the tabulator. An illustration of the work may be given: Supposing five thousand population cards were sorted first according to twelve places of birth; then each place of birth could be again sorted according to twelve age periods, and the clerk would then be able to enter one hundred and forty-four results upon the result slip.

For use in such work as the United States census, I have invented a new machine which I call the "Abacus automatic tabulator." It has one hundred and forty-four compartments, each with a tallying capacity of five thousand points, or a total of seven hundred and twenty thousand for the machine. The registering device locks itself after each tally. The machines may be instantaneously set back to zero without removing them from the machine. No written slip or punched card is necessary, the clerk working direct from the original schedules. The "correlation" is done in the machine itself, and the results can be easily taken off in the form required for copy. It would be possible to take five hundred thousand names and arrive at the sex, whether native or foreign born, points of color and race, and five points of conjugal condition with one handling of the schedules. Then, if you wished to know the number of foreign born females, white, and married, a glance at the proper register will give this, or any other desired correlation. Work could begin upon tabulation as soon as the schedules were received at the census office, without any intermediary processes, and the tabulation does not deface or injure the original schedule in any way.

The capacity of the "Automatic door tabulator" was but 12,000 tallies, and yet 18,000 details were secured upon the occupation tabulation. The capacity for detail of the "Abacus automatic tabulator," with 820,000 tallies, is practically limitless.

For machine work, slips, or pieces of paper containing one or more recorded facts, are of great utility. In the occupation tabulation 720,000 slips were used; in the divorce statistics prepared by the United States

department of labor, 325,000; in preparation of the Massachusetts registration report, 125,000, and these are tabulated by the automatic door counting machine.

It is needless to say that none of the machines can be operated by turning a crank. The brain must prepare the work for the machines, and the "scheme" must be right and complete.

Advanced statistical work at the present day requires exhaustive investigations, with nothing left for aftermath. Then must follow exhaustive tabulations, presented in such a shape that he who reads may learn all without recourse to pencil and paper to discover latent facts. It must be borne in mind that the results can never be any better than the information secured. No process of tabulation can convert insufficient or incorrect data into complete and trustworthy statistics.

Having considered the devices and machines for tallying or counting one at a time, we will examine those used for aggregation or addition. Such machines are used in tabulating the results supplied by schedules devoted to manufactures, agriculture, the fisheries, commerce, wealth, indebtedness, etc.

The statistics upon the agricultural schedules, in the census of 1885, were aggregated by the "chip system." This is a simple plan or process of adding 144 columns at a time. That is, the results given by the chip system are the same as would be obtained by ruling 144 columns, writing the necessary figures in each column, adding each column, and then taking off, or writing down the results. The "chip" is a small printed card, two and one-fourth inches square. The denominations, units, tens, hundreds, thousands, etc., are indicated by various colors. The "chip case" holds from units to millions, with digits from 1 to 9 under each denomination. The case has sixty-three compartments, and the "chipper," or clerk, picks out any number from 1 to 9,999,999, or any decided number, in the same manner that a compositor takes type from his case. By using the same sorters as were available in the population work 144 columns can be prepared for addition by one clerk, and the work can be done in half the time required by the old plan, and with much greater accuracy.

The chip system was also used in aggregating the statistics of manufactures, the fisheries and commerce. The totals were obtained by the chip system and the details and proof were secured by the electrical adding machine. In the electrical adding machine, addition is reduced to simple notation: The numbers are written upon the machine; as soon as the writing is completed the number is added. The time and brain labor usually required in addition is all saved, for the adding is done by the machine, the electricity doing the "carrying," or the part which calls for brain labor on the part of the clerk. At the same time that the electrical adding machine does one kind it also proves the previous work done by the chip system. The necessity of doing work twice is thus entirely avoided. The statistics of the fisheries, commerce, wealth, indebtedness, etc., may be aggregated in the same way as those for manufactures.

In the preparation of copy several small adding machines are used, each particularly adapted to the work to be performed. None of these machines have been invented simply for sale. The work was to be done, and the various machines were invented to do the work required. Thus in 1875, a quick method of aggregation was needed in handling the statistics of manufactures,

agriculture, etc. This was found in the "valuation, quantity and number sheet," a device by means of which a clerk can add all day without making a figure. Checking takes the place of figures. The device is based upon the decimal disintegration of numbers, and it is as easy to enter 1,000,000 as it is 5 or 10.

In 1885 the "Billionaire adding machine," which is run by sight, the "Button adding machine," which is dependent upon accurate touch or feeling, and the "Cylinder adding machine," which is governed by hearing, were used for minor additions. The "Rotary counting machine," with a capacity of 25,000, was found of great value in adding small numbers like 5, 18, 32, 21, 14, etc., giving an instantaneous and mechanically correct total.

It is thus seen for population and social statistics that the self-counting tally sheet, Pascal counting machine, automatic door counting machine, and Abacus automatic tabulator, are particularly adapted and have been successfully used. For statistics of agriculture the chip system did the major part of the work, while manufactures, the fisheries and commerce required the valuation, quantity and number sheet, the chip system, the electrical adding machine, and several smaller counting and adding machines previously specified by names.

Another aid made use of in the census office has been Thatcher's percentage machine. Owing to the smallness of the figures upon the scale, its continued use has been found detrimental to the eye-sight, and giving only four places, two for whole numbers and two for decimals in percentages, we have been able to utilize it in but a small proportion of our percentage calculations. I have in preparation a book, which will consist of thirty-two quarto pages, which will enable anyone to figure percentages by addition. Its capacity will be percentages of any number from one to one billion of any other number from one to one billion, with decimals to the seventh place, and the decimal point "fixed" in print, so that the usual errors in "pointing off" cannot occur. The multiplication proof sheet is of value in proving large multiplications, and anyone who can multiply 9×9 can become proficient in its use. Statisticians are not "lightning calculators," but I have a rule which, carefully followed for a week, will enable a person to add at least ten times as fast as usual with him. There is no machine in use for figuring averages.

It will be seen that there is no single machine to do all kinds of statistical work, but a special machine for each special kind of work. It is impossible to give general rules to suit all kinds of tabulations. Each investigation is a problem in itself. There is only one way—to average the plan or "scheme," and then select the proper machine to do the work.

In all my inventions I have tried to bear in mind several cautions given me by your honored president. First, to be sure that the time taken to prepare for machine work does not cost more than it would to do it in the old way. Second, as between man and machine, when they are on an equality, choose the man. Third, in all cases machinery should be an aid and not a competitor.

Statistical tabulation has won a place, and it is no more reasonable to expect that old ways can successfully compete with machinery in this line of work, than it would be to say shoes can be made cheaper by hand than by machinery.

It is undoubtedly the popular opinion that the necessary machinery is very

expensive, and that it would not pay to use it unless upon census work or some equally large investigation.

The cost of a "Statistical factory" does not quite reach \$700, and could be reduced by leaving out certain machines from the subjoined list:

1,000 self-counting tally sheets.....	\$ 35.00
1,000 valuation, quantity, and number sheets.....	50.00
1 Automatic door counting machine (12 dials).....	75.00
4 extra sorters, for chip system.....	40.00
1 chip case, and chips.....	25.00
1 cylinder—"Billionaire" or "Button" adding machine.....	25.00
1 electrical adding machine.....	200.00
1 Abacus automatic tabulator (144 dials).....	150.00
1 copy "Addition percentage" book.....	10.00
1 copy a "Statistical factory" (book).....	25.00
Result slips, etc. (full assortment).....	50.00
Total.....	\$685 00

The statistician is not simply a book-keeper; he is something more, and the character of his work is constantly growing higher. The statistician works harder with his brain in order to reduce the mental strain upon his assistants. He has a right to be considered as a scientific man, and to rank with entomologists and paleontologists rather than with book-keepers and accountants. When this fact is learned by legislators his compensation will be made to correspond to his professional standing. He takes the "dry" bones, the statistical tables, and vitalizes them. He clothes them with language that attracts the attention, influences the action, and directly or indirectly improves the condition of the body politic.

The convention now took a recess until the evening session.

--- EVENING SESSION. ---

At the opening of this session, Secretary Hutchins said: It is my desire to have the question settled as to the publishing of the deliberations of the convention. These publications have been considered a public benefit by most of the chiefs of the bureaus present; but one has objected on the ground of economy. As secretary of the association, I desire to state that calls have been made upon me for copies of these proceedings from nearly every State in the union, and not a few have come across the water. Wage-workers are deeply interested in these conventions, and are becoming more so yearly. In my judgment it will be a grave blunder to cease publishing these reports, and I trust that this convention will not commit such a blunder.

Mr. Bolles, of Pennsylvania, was of the opinion that the proceedings were of little interest to the general public, and regarded it as a waste of money to print them.

Mr. Betton, of Kansas, thought the reports of the proceedings were valuable, and he used them every year to help him in making up his report.

Mr. Hotchkiss, of Connecticut, said that the reports of previous conventions had been of value to him, and have been read with interest whenever they have been circulated in Connecticut. He was in favor of publishing the proceedings.

Mr. Jenkins, of Nebraska, moved that the proceedings of the convention be published, but that before such publication, the remarks of each person be submitted to him for revision, if he so desires. This vote was adopted with but one dissenting vote (Prof. Bolles, of Pennsylvania).

Among those who have been in attendance who were not commissioners, were: Archibald Blue, deputy minister of agriculture and secretary of the bureau of industries for Ontario, Toronto; Edward W. Bemis, professor of economics and history, Vanderbilt University, Nashville, Tenn.; Frank A. Flower, ex-commissioner, Madison, Wis.; Rev. Jesse H. Jones, editor, North Abington, Mass.; James H. Britton, special agent, department of labor, Washington, D. C.; John H. Davis, chief clerk of Rhode Island Bureau; H. Hollerith, engineer, Washington, D. C.; Rev. Graham Taylor, D. D., professor of practical theology, Hartford, Connecticut, Theological Seminary; Col. W. M. Grosvenor, of the *New York Tribune*; George H. Wood, superintendent of Typograph Co., Hartford, Conn.; William C. Hunt, special agent of the eleventh census of the United States; George K. Holmes, statistician, Great Barrington, Mass.; Rev. Josiah Strong, D. D., general secretary of the evangelical alliance, New York; S. N. D. North, secretary national association of wool manufacturers, and special agent of the eleventh census for wool manufacturers; Annie L. Sargent, of the charity organization society of New York; Mrs. Lita Barney Sayles, general secretary of the sociological society of America; Frederick W. Kruse, special agent for the census of 1890; President F. G. Woodworth, of Tougaloo University, Miss., and Factory Inspector Simmons, of Connecticut.

REMARKS OF VISITORS.

There being no further discussion of questions by the commissioners, President Wright called upon some of the visitors present, who happily responded. The first was

ARCHIBALD BLUE, 'ESQ., DEPUTY MINISTER OF AGRICULTURE, ONTARIO,
CANADA.

The scope of my work is somewhat different from that which you are representing here. It is in a different line. At the time of the commencement of the work of the department, it was intended merely to make inquiries into the great industries of the country; but after a time an act was passed requiring the department to cover all such industries. We have merely taken up the work from time to time, and five years ago we undertook the collection of labor statistics. I placed the exact schedule we are using for the present year on your desks last evening, and if they have been examined, I invite criticism as to the work we are undertaking. I have thought it well in this work to continue the investigations on the same line for a series of years, as I have satisfied myself that it is better to pursue the same line of investigation than to do one thing one year, and another the next. This is the method of my department at Ontario.

The conditions are not so suddenly changing; that what is true this year will not be true the following year. The work is about the same as employs the bureaus here; that is, we have the same difficulties to overcome, and it is hard to collect information from employers, although we collected a good deal, with all the difficulties to contend with. Of course, it is hard to get good results with the limited means at our command and the difficulties we have to contend with. We are making a number of inquiries on different lines each year, as I have already stated. These lines are being pretty well investigated. For instance, we are inquiring this year, as during the past four or five years, on the following subjects: The demand of wages, whether the wages are paid weekly, every two weeks, or monthly; when or not paid in cash; also inquiring into strikes and lockouts; labor organizations; ready reports for the use of workingmen, and special subjects from time to time.

These are a few of the most important subjects relating to the condition of the industries in the country, and we get our information as fully as we possibly can through special agents, and we are able to furnish the public and legislature with information that will give them as accurate a report as can be obtained of the industries of the country. I have mentioned that the chief work was in connection with agricultural statistics. In addition to ascertaining the products of each year, we may also be able to get the cost of production; also statistics relating to farmers. There are about twenty thousand farmers in the provinces. We are unable to get information from the workingmen themselves, but we think the farmer gives pretty good information on that subject. I feel interested in the different kinds of work which the bureaus in the United States are taking up, and especially the one which you have just been considering.

It is possible that the employment of child labor is not very extensive in our country, perhaps for two reasons; one that our industries are not carried on such an extensive scale as in the United States; and secondly, because there is a requirement on the part of the school authorities that enforces attendance during the entire school year, and we have learned from statistics that only a very small percentage of each school have absentees during the year. I was very glad to see the gentlemen from Massachusetts so interested in the collection of the annual statistics of the manufacturing establishments, and it would be well, indeed, if you could continue to get the legislature to vote more means for your bureaus in all the States and provinces.

Mr. President, I shall occupy no more of your time at present. I have been very much pleased with the proceedings of the convention, and I have gained valuable information which I shall use in my work in the future, and I shall often review with great pleasure my trip to Connecticut to attend your convention.

COL. W. M. GROSVENOR, OF THE NEW YORK TRIBUNE.

I hardly feel that it is fitting or proper that I should endeavor to speak upon such subjects as are being discussed before this convention. However, I am glad to be here, and shall gladly give any information I can. It has never been my fortune to have charge of a bureau, but I have given considerable attention to the investigation of labor statistics. I have been exceedingly interested in the work, and I have learned a great deal from the

discussions which it has been my privilege to listen to. Many things have occurred to me in the direction already suggested by you, and I can readily see the numerous difficulties with which you have to contend in the performance of your work.

You have taken up a good deal of work, considering all the difficulties you have to contend with, and the means and force at your command.

Another thought has occurred to me, and I know it has occurred to all the different bureaus, and that is, the way the manufacturers treat the commissioners and chiefs when they ask for information. In listening to the discussion as to printing the proceedings of your convention, it seems to me that nothing could be more important to the different bureaus than these proceedings, when published. They are read by the thinking men of the country, who are very anxious to see what work the different bureaus are carrying on. People can see the figures and facts concerning labor and the limitations, etc.

Another suggestion I think of at this time is, that the bureaus often attempt too much, and that they should be unified, and their labors should be largely in the same direction. It should be possible for the commissioners in the various States to seize upon some points of universal interest. I would suggest that a record of prices of certain commodities might be kept throughout the year. Many of your investigations are peculiar to your respective States; in one State you have mining labors, and in another State factory labor, and so on. These investigations are not by any means to be discredited, but on the contrary, you are each doing a grand work for the whole country.

I have for some fifteen years compiled tables regarding the prices of several hundred articles. These records are kept every day at my home, and any day that I want to find the price in a certain market in comparison with that of any year before at the same time, I can find it out for two years, or ten years, or fifteen years before. I can do so at a glance on a single sheet of paper. These records are very interesting to me. If you should keep such a record in connection with your bureaus, you could compare records every year, and would be posted as to the rise and fall of prices. You could compare results very easily. I get some four hundred quotations every day, which I keep on record. You can get in this, the average earnings in different States from year to year. For example, you can compare prices in New York, Massachusetts, Connecticut, Missouri and Nebraska, and find the cost of productions very easily. Suppose you take up three or four classes of labor, the larger or representative classes, and work for a common end; you will have some difficulty in going into the matter too far. I have tables that cover thirty distinct quotations for twenty years, and I was satisfied that long before I reached the last year I knew what the average was.

I would be glad to send you any information in regard to my work at any time, so far as in my power.

PROF. EDWARD BEMIS (VANDERBILT UNIVERSITY), NASHVILLE, TENN.

I will say that I did not expect to be called upon, but that I am glad to have the privilege of attending this convention. I would give up everything, and come from my home here for the special purpose of being present at this convention.

I would suggest that in collecting facts with regard to cost of living, more attention should be paid to rent, which workingmen claim is a heavy burden upon them.

The cost of living is a very difficult matter for satisfactory investigation. The rise of rent is a very important problem.

MRS. LITA BARNEY SAYLES, SECRETARY OF THE SOCIOLOGIC SOCIETY OF AMERICA, KILLINGLY, CONN.

It is with great pleasure that I stand here today and look into your faces. Several of you I have met personally, others I have never met face to face, but I know you all through my correspondence with the several bureaus.

I did not come prepared to make a speech. If I had known that I should have been called upon, I should have liked to have prepared a condensed paper upon subjects connected with the Sociologic Society. The work of that society, with which I am connected, depends very much upon your statistics and reports.

As I said before, it gives me pleasure to stand before you and thank the president for calling upon me to say a few words, and I shall be pleased to take the hand of as many as choose to come to this side of the hall to call upon me.

REV. JOSIAH STRONG, D. D., GENERAL SECRETARY EVANGELICAL ALLIANCE, NEW YORK CITY.

I desire to express my appreciation of the courtesy by which I am present. When I first saw a notice of this convention I cast a desire hitherward, but had not thought to follow it in person until I received a very cordial invitation to do so from our host, the commissioner of Connecticut.

I have a deep sense of the importance of the work in which you are engaged. As I understand it, your work is primarily to gather facts, a most difficult task. There is nothing so elusive, nothing so hard to catch and to cage as a fact. Some seem to find no difficulty in amassing them, but the philosopher, Josh Billings, says: "I would rather not know so many things than to know so many that aren't so." There can be no true science without a correct and definite knowledge of facts. You are collecting materials for a true social science, and this is pre-eminently *the* science of this generation, and will be of the next.

In every period of human history there has been some root idea out of which the great thinking and the great doing of the time have sprung. Of our own period that root idea is the right relations of man to his fellows. From it has come the abolition of slavery and the elevation of woman. From it has come the spread of democracy, which is an attempt to realize the right relations of man to his fellows, politically. From it come socialism and communism, which are attempts to establish right relations between man and his fellows, socially and industrially.

Socialism wants to save society without saving the individual; wants to establish the brotherhood of man without accepting the fatherhood of God. Jesus Christ told the world how to save both the individual and society, viz.: by love to God and love to our neighbor.

The Christian church has seemed to believe that religion consists in right relations of the individual soul to God, and such relations are established when, in obedience to Christ's first great demand, a man gives his supreme love to God. But the church seems to have almost forgotten that the second great demand is *like unto* the first, and equally binding.

During the early part of the period of which I am speaking, the church, occupied with bringing individuals into right relations with God, left for the most part to unbelievers, like Rousseau, Proudhon and Karl Marx, the study of sociological problems—how to bring men into right relations with each other. Hence the church has, in a large measure, lost its hold on the masses; while socialists have failed because they have generally disregarded God's claims to love and obedience, which spring from Divine Fatherhood, and from which alone can come human brotherhood.

Jesus Christ taught what are the two hemispheres of truth, which are alike necessary to produce the new world wherein dwelleth righteousness; and it is only by accepting the teachings of Christ, by applying the principles of the Gospel to all the relations of life,—social, industrial, commercial, political,—that the labor problem and the other great problems of our times can be solved.

The new movement of the Evangelical Alliance is an attempt to secure the co-operation of the churches in applying the gospel of Christ to the entire life of the community. We aim to bring together the most thoughtful and Christian men of each town to study the problems of their own community. By systematic and thorough house-to-house visitations they gain a personal knowledge of existing needs, and brings to bear a personal influence for good; and while their systematic and thorough investigations under the crust of society reveal what needs to be done, their co-operation makes them strong to do it.

I might quote to you the opinions of many eminent men expressing the conviction that the plans of the alliance, which have been only very partially outlined to you, are entirely practicable, and give promise of the greatest usefulness; or I might give you illustrations of the actual workings of the plan where it has been adopted, but I must not take your time. I will only add that I do not believe that you can make a better use of your annual reports than to send a full set of them to the Alliance, at 42 Bible House, New York. I thank you for your attention.

REV. GRAHAM TAYLOR, PROFESSOR OF THEOLOGY AND SOCIOLOGY, HARTFORD, CONNECTICUT.

It is a privilege to improve this opportunity so courteously and unexpectedly afforded to an interested attendant upon your meetings, to give heartiest expression to the high appreciation I have of the great value and wide reaching influence of this convention. You have laid our city and commonwealth, and all their public institutions and business interests, under great obligations to you in coming to our capitol to hold your national convention.

As a representative of institutions and interests which you may not have been accustomed to regard as influenced by the work of the labor bureau, let me assure you that nowhere should your labors be more deeply appreciated, or their published results be more carefully studied than among the churches and in the theological seminaries, where their ministers to the peo-

ple are trained for their very practical work. For first of all, by your collection and classification of facts, you afford a working example of the scientific and practical method of study, which is gaining sway in all departments of education. To the demand of the age that facts must precede theory, and be the basis of methods of work, the church is giving belated yet earnest response, as indeed she must, to retain, much more to increase, her hold on even the present generation.

Your facts are making as imperative demands for recognition also upon the theorists in political economy. These facts of yours will not let what has been considered well enough alone. They show something better to be both necessary and possible. They force the human personality, with its capacity for suffering and reaction, into the calculation of the economist as one of the prime factors of the common problem. They declare that by so much, as a man is a man, labor is more than a commodity.

No man among you may even be able to suggest the solution of these difficulties and delicate complications of our modern life, but you are nevertheless building better than you know. The facts you are everywhere gathering and carefully sifting will yet make it possible for some social economist to arise, and upon a wider basis of fact than has ever been before accessible, draw more accurate inductions than have ever before been possible for the ultimate solution of the problems of the industrial situation. In helping to evolve a science of statistics, too, you are rendering one of the most needed services to the church, as well as to the whole community. But you will not, I know, deny that your relations with the religious community are reciprocal, nor will you regard the emphasis I am disposed to put upon the influence of the churches and their work in your fields as unwarranted. To any solution of our industrial problems the need of intermediary influences between apparently conflicting interests and antagonistic classes is recognized as imperative. Now, for these middle men and mediating agencies, society is more dependent upon the local church than upon any or all its other organisms. By its fundamental doctrines of the universal Fatherhood of God, and the common brotherhood of man, the Christian church alone is not only committed to this intermediary position, but is capable of assuming it. Alone among social organizations, it in theory, at least, knows no classes. Its membership and ministry cannot without self-stultification be classified. Their only Master is the Son of Man. Those of you who come closest to the most discontented of the laboring classes will bear me witness that few, if any, among them have aught to say against Jesus, the Elder Brother of us all. Their complaint is solely against those claiming to follow Him who seem to them to misrepresent Him, against a class-church. Have we not, then, around the person of the Son of Man, the only common ground upon which we can all stand? Are not his true followers the only mediators among men? Can they not best say to those who differ, "All ye are brethren?" Does not the church of Christ in any community really hold the key of its situation? Can social economics afford to ignore such a unifying force as the Christian spirit has ever proven itself to be when and wherever it has been allowed to assert itself? Aside from its purely divine institution and religious mission, the church surely has a place among men and a social economic mission for which there is no substitute, and which invites the freest and largest use.

Beyond the statistical reports and economic conclusions of the bureau in Connecticut, as valuable as they are conceded to be, the Christian brotherliness of our commissioner, Mr. Hotchkiss, has been pre-eminently serviceable to this commonwealth in keeping the bond of brotherhood between its employers and employés stronger, tenderer and more vital than it could have been without his personal touch upon the hearts and hands of both. Besides this personal ministry to the individual, Christianity has a new social status to establish on the earth. It comes preaching everywhere the gospel of the kingdom, as its Master began to do. It claims not only to have salvation for the individual, but to be the Savior of society. And the church is more and more awakening to its public and social mission.

The laws of heredity, sanitary conditions, economic circumstances, and the whole social environment of the people are now seen to be hers to study and shape. These are imperative studies in preparation for the Christian ministry of today. When the old and only gospel is preached upon the new basis of these underlying facts, it will have strangely new power. When poverty, vice and crime are clearly seen in their relations to these all conditional factors, these great open sores of the body politic will have preventive agencies, reformatory effects, and charity methods of a different and higher efficiency than those with which we now almost toy with death, and with the use and predominance of such a church, equipped with such scientific apparatus, a new kingdom will be at hand, the kingdom of heaven on earth. In the study of the social and economic conditions of Christian society, let us be brethren and co-workers in State and church.

REV. JESSE H. JONES.

I thank you for this opportunity to speak. Perhaps I may appropriately say something about child labor in the factories, as it was my fortune, several years ago, under your direction, Mr. President, to investigate the condition of labor, when as yet, and for years after, there was no labor bureau here. During that investigation I visited most of the larger textile factories in the State, and I found no exception to the fact that it was the parents who crowded the children into the factories rather than the employers who draw them in. And the parents who did this would unblushingly falsify concerning the age of their children in order to get them into the mills. This, I think, ought to be said plainly and distinctly for the employers.

As I have given some study to the problem of the city, perhaps I may be permitted to say a few words concerning what Rev. Mr. Strong has just said. His plan of visitation is excellent, helpful, truly coöperative with the statistical work of the State, but it can never, I think, be more than a palliative; and with all of it that can be done, the evil will inevitably gain ground on the good of the city from the very nature of the city as now constituted, and from the necessary working of that nature. When Thomas Jefferson said, "Great cities are great sores," he said what was and is, and ever will be, deeply and dreadfully and surely true, while society continues in its present order.

The constitution of things remaining as it is, no device or effort of man can change the current of life from its present natural working of increasing evil in the cities. There is only one possible solution of the problem of

the cities; and I would fain to utter that solution with all the fervor of which I am capable: **THE CITY, IT MUST BE DESTROYED.** Except as this is done, it will continue to reek and rot and ruin its myriads of inhabitants.

But there are two ways to destroy the city. One is the old way, to sack the city, slaughter the inhabitants, burn the buildings and leave the place a waste like Babylon. This is cutting out the sore with a knife; but then other sores keep coming. This is not a solution of the problem. The solution is to cure the body politic of the sores, so that they will never come any more. That destruction of the cities, by which to cure society of them, is to diffuse them into vast villages. And this is the way to do it: Let our municipalities, in a legal and orderly way, seize all the railroads, horse and elevated, and run them for the people. Then, by a system of tickets, give every working-man a free ride to and from his work. Along with this give him the eight-hour day; and then he can shoot out to his home, thirty miles, if need be, every night and back in the morning. Then he can have his cottage with a garden behind it, and a patch of green all around, and nobody will be constrained to live in the city. And when our cities are thus expanded into plats, in which every family dwells amid a carpet of green, like South Manchester, over east of us a bit, then they will have unfolded into the New Jerusalem.

Mr. President, again I thank you for the opportunity to speak.

HON. T. S. GOLD, SECRETARY OF THE CONNECTICUT STATE BOARD OF
AGRICULTURE.

I did not expect to be called upon to speak here, but the thoughts so happily expressed on the connection of moral growth with material prosperity, calls to mind an address delivered some forty years ago by Rev. Dr. Horace Bushnell, of sainted memory, before the Hartford County Agricultural Society. Referring to the decadence of agriculture in some of the hill towns, and the consequent difficulties of sustaining the institutions of education and religion in those places, from the outflow of their young men, eager to enter upon the more exciting contests of life, he says in substance: "Is it not time for us to consider whether, instead of sitting in a board of missions, we should not rather be sitting in a board of agriculture, to consider what can be done to sustain and revive the agriculture of our State?" So new was this idea at the time, that his words seem almost prophetic. He recognized that material prosperity was an important element in moral growth.

Your work as a convention of labor commissioners is in that line; and I am happy to hear the expressions that the material prosperity you are seeking to advance is only to be secured with a corresponding mental and moral growth, and that this is the crowning glory of the whole work. It is for this end that the board of agriculture has been established, and has been laboring; and be assured that we heartily welcome you as co-laborers in the work of alleviating the burdens, relieving the cares, and elevating the moral condition of the people.

Father Hyacinth, in an address delivered in Paris before the peace league, refers to the union of agriculture, manufactures and commerce, as pouring out those great streams of physical life, without which all moral life itself would speedily die away.

Again, assuring you of our hearty welcome to Connecticut, and our high appreciation of your work, I thank you for this opportunity of giving my testimony to the necessity of your work in this age of the world, and an assurance of hearty co-operation and support from all who have at heart the good of their fellow men.

Frank A. Flower, ex-commissioner of Wisconsin, who had come one thousand five hundred miles to be present as statistician of the city of Superior—not only the first representative of that kind in our conventions, but the first ever elected by any city in the United States, thus indicating the energy and progress of the younger cities of the West, being called upon, said:

The statistics of industrial and material affairs certainly come from the centers of population, and I think that the new, though enterprising and growing city which I represent, has taken one of the most important and practical steps of the time, in this line of gathering and promulgating statistical information. If all cities had such officers, their reports would be condensed, classified and more widely published by the several States, and the reports of the States still further condensed and digested and published by the federal bureau, thus making at the last a succinct, but clear and complete, industrial picture of the United States. Henry K. Oliver, of Boston, was the first State statistician; Carroll D. Wright, the first federal statistician, and, I think, I the first city official of that kind.

I will not take further time of the convention, but am very glad to be with you especially to note the progress these bureaus are making.

The hour for adjournment having arrived, Mr. Hutchins said: It has occurred to me, now that the questions have been fully discussed, that we have a simple business meeting tomorrow night, after our return from the excursion, and to that end I make a motion for a recess until 8 o'clock tomorrow evening.

The motion was carried.

A VISIT TO FACTORIES.

Previous to the meeting of the convention, Commissioner Hotchkiss had very thoroughly arranged for a visit to three of the principal factories of New England. Those selected by him were the Cheney Brothers' silk mills at South Manchester, the Willimantic Linen Company's thread mills at Willimantic, and the Ponemah cotton mills at Taftville, near Norwich. The entire day, from 8 o'clock until 8:30, the party were kept moving to the best advantage, reflecting great credit upon everybody connected with the excursion, but most of all upon its originator, Commissioner Hotchkiss.

The train was a special one of three cars over the New England railroad. It left Hartford at 8:05 on the morning of the 27th. The excursionists comprised not only the members of the labor bureaus but a number of invited guests. The following is

A LIST OF THE PARTY:

Samuel M. Hotchkiss, commissioner of Connecticut, and S. N. Benedict and Samuel S. Hotchkiss, of that department; Carroll D. Wright, commissioner of the department of labor, Washington, D. C.; Commissioners H.

G. Wadlin, Massachusetts; Lee Meriwether, Missouri; Jas. Bishop, New Jersey; John S. Lord, Ills.; General Alfred H. Heath, Michigan; H. M. Stark, Wisconsin; Colonel E. R. Hutchins, Iowa; Frank H. Betton, Kansas; Samuel W. Matthews, Maine; John Lamb, Minnesota; J. B. Bowditch, Rhode Island; John Jenkins, Nebraska; Deputy Commissioners E. J. Keene, New York; Matthew J. Simpelaar, Wisconsin; J. F. Crowell, North Carolina; John H. Davis, Rhode Island; also, ex-Commissioner Frank A. Flower, Wisconsin; Archibald Blue, deputy minister of agriculture of Ontario and secretary of bureau of industry; U. S. Senators Platt and Hawley, Congressmen Simonds and Russell, of Connecticut; Governor Bulkeley, Lieutenant-governor Merwin; Senator Coffin, of Middletown; Senator and Judge John M. Hall; Representatives W. B. Glover, of Fairfield, and J. H. Chapin, of Meriden; Judge Carpenter, of the supreme court; Rev. Dr. George Leon Walker; Dr. Williston Walker, Rev. Dr. Graham Taylor, Rev. Messrs. Bradin, of St. John's church, and Tompkins, of Christ church; E. N. Hardy and A. L. Struthers, of the theological seminary; Hon. Frederick J. Kingsbury, of Waterbury; Prof. G. N. Boardman, professor of theology in Chicago seminary; Adjutant-general L. A. Barber, president, and A. C. Dunham, vice-president of the Willimantic Linen Company; General E. S. Boss, of Willimantic, agent of the company; Leverett Brainard, of Hartford; Judge W. F. Henney, E. D. Robbins, Superintendent Dibble, of the capitol; H. C. Baker, W. A. Countryman, and Thomas S. Weaver, of the Hartford Evening Post; C. H. Clark, of the Courant; Hon. H. Wales Lines, of Meriden; Colonel Frank W. Cheney, Major R. O. Cheney, J. W. Cheney, H. G. Cheney, and Charles Cheney, of South Manchester; Miss Annie L. Sargent, agent of the Charity Organization Society, of New York City; Miss Ada Whiting, teacher in Tougaloo university; Rev. F. A. Woodworth, president of that institution; Prof. Edward W. Bemis, of Vanderbilt university, Nashville, Tenn.; A. B. Woodford, of Indiana university, of Bloomington; Colonel W. M. Grosvenor, of the New York Tribune; Mahlon R. Chance, secretary New York tariff league; Rev. Dr. Josiah Strong, of New York, author of "Our Country;" Rev. Jesse H. Jones; General W. F. Draper, of Hopedale, Mass.; H. Larabee, of Windham; W. S. Simmons, of Plainfield, factory inspector; D. L. Clark, of Milford; Hon. T. S. Gold, secretary of the State board of agriculture. From Rhode Island: Ex-U. S. Senator Chace, Senator Dixon, Governor Ladd, Horatio Rodgers, Robert Knight, H. L. Lippitt, Arnold Chace, B. F. Lapham, Jeffrey Hazard, G. H. Hinckley, Superintendent Palmer (New York & New Haven railroad); Samuel Foster, E. P. Taft, Orry Taft, W. F. Sayles. From Norwich: Henry B. Norton, Edward Chappell, Moses Pierce, General W. G. Ely, A. A. Young, A. P. Hitchcock, editor of the Norwich Bulletin; George Pierce.

The visit to these mills was of great interest and value. In the Cheney mills were found about 2,000 operatives, two-thirds of whom were females.

In the Willimantic and Ponemah mills, 1,600 each, with about the same proportion as to sex.

Especial care has been taken by the proprietors for the comfort and health of wage-workers, and the results were plainly seen.

